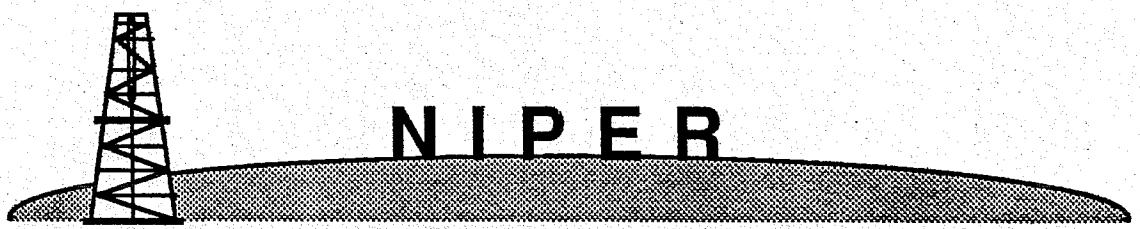
PROJ USER MANUAL

EOR Project Data Base in RELIANCE

Action (HE for help, EX to exit): __

CONTRAST 1 ON OFF 0



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EOR PROJECT

DATA BASE

USER MANUAL

by

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1. INTRODUCTION

1.1 About This Manual

This is a status report on the implementation of the DOE Enhanced Oil Recovery Project Data Base (PROJ) into the RELIANCE data base management system (DBMS) on the Bartlesville Project Office's Concurrent computer. The goal of this manual is to present, at a novice level, some of the basics for using the RELIANCE DBMS as currently implemented for PROJ, as well as the technical data for the advanced user for this specific implementation.

NIPER has programmed a number of user friendly features into an integrated system of application programs called NORIS. NORIS is introduced in Chapter 2, Getting Started. "Getting Started" begins with logging-on procedures for the computer and walks the novice through typical retrieval examples and a sample data entry using NIPER programmed application programs. Chapter 4, RELIANCE Routines, briefly describes how a user would build and use RELIANCE DBMS data retrieval and entry routines. Brief examples are used to illustrate basic procedures and the RELIANCE manuals are referenced for more detailed information.

The technical information on the RELIANCE implementation of the EOR Project Data Base is briefly described in Chapter 3, Data Base Structure, and Chapter 5, Application Programs. Details of the dictionary, data placement, data views, and profiles are included in appendices.

1.2 About the EOR Project Data Base

The EOR Project Data Base was initiated by the Department of Energy (DOE) in 1978 and includes data collected from the Tertiary Incentives Program in 1979. The initial data was loaded into System 2000 (S2K) DBMS at the Energy Information Administration facility in Washington, D.C., and used a file structure similar to the structure shown in figure 1.2.1. The structure

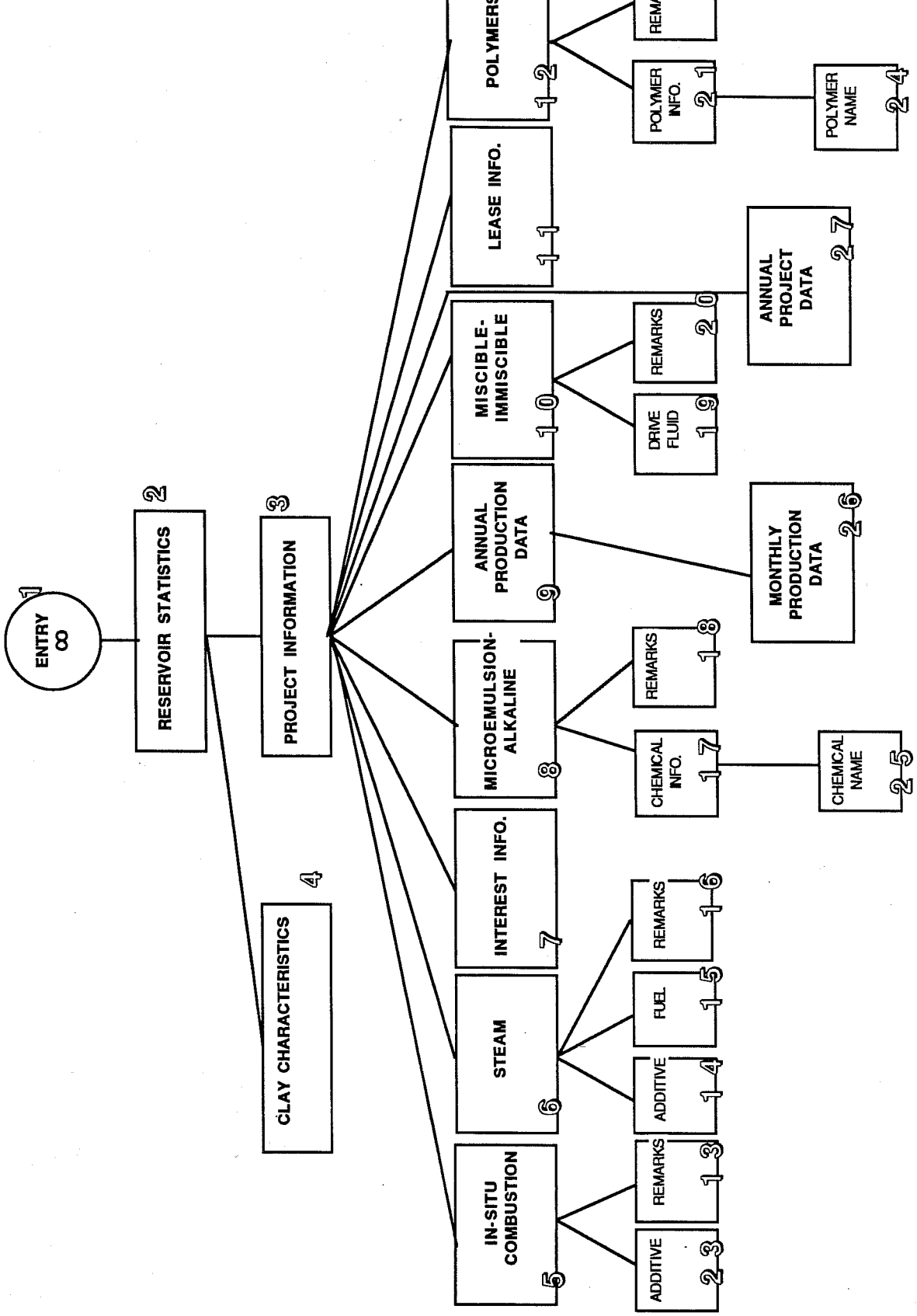


FIGURE 1.2.1 - Current EOR project database in S2K at EIA.

shows the general content of the data base as well as the hierarchical nature of the S2K DBMS implementation. This data base is an important part of the Tertiary Oil Recovery Information System (TORIS) managed by the Bartlesville Project Office (BPO). The design and development of the S2K data base is described in "Bartlesville Energy Technology Center Enhanced Oil Recovery Project Data Base" (DOE/BETC/SP-83/27), January 1984, by T. R. French and R. M. Ray. The data base has grown from the original 627 EOR projects in 1979 to 1259 EOR projects currently installed in the Bartlesville data base. Expanded project data have been taken from annual reports on DOE incentive and cost-shared projects, as well as data supplied through DOE contracts. Data updates occur frequently with new projects added roughly every three months.

1.3 About RELIANCE

RELIANCE is a data base management framework designed to operate on Concurrent computers (formerly Perkin-Elmer). Its strength is in online transaction processing and retrieving of related data. It is a collection of software routines which allows development of a tailored DBMS for a specific implementation. An implementation is expected to be continually evolving. Developing an implementation involves building data definition and screen formats interactively. Applications programs using RELIANCE subroutines or those written in FORTRAN VII, COBOL, or C languages are used to control transactions (messages between the terminal and the computer). The transactions can range from a simple retrieval of data elements to a complex Boolean search of up to four data files at once.

NIPER, with assistance from the Bartlesville Project Office, has designed a data-file structure that is optimal for the EOR Project Data (see figure 1.3.1). NIPER has developed numerous screen forms for acquiring information

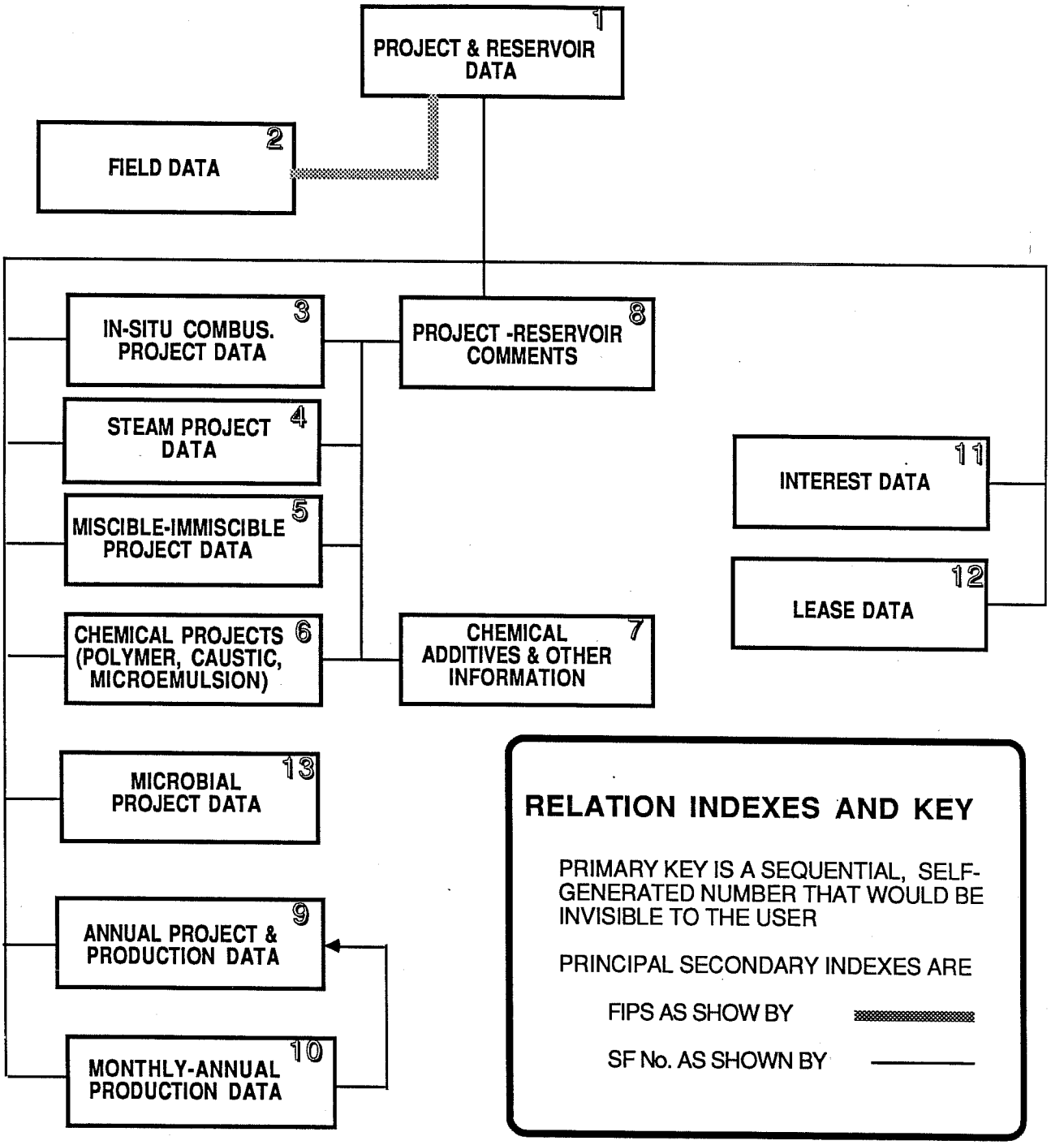


FIGURE 1.3.1 - Final RELIANCE structure of EOR project database.

and data updates in an interactive mode. Numerous user friendly application programs have been developed that perform complex searches on selected data, performed selected statistical analyses of the projects, and provide simple display of information on a project.

The primary placement area for the database is named TORSDMS and consists of 390,610 sectors (256 bytes per sector) of contiguous disk space which currently resides on BPOJ on the BPO computer system. However, mention should be made that because of an average compaction of 63.5 percent, only a little over one third of the available space was filled at delivery time. This allows a considerable amount of free space for adding new EOR projects and to continue adding monthly and yearly production data to existing projects without leaving the primary placement area.

1.4 User Prerequisites

An understanding of the basic information in the Project data base and knowledge of the pathway to data access are required. Familiarity with the structure shown in figure 1.3.1 will be helpful. The data dictionary detail in appendix 8.3.1 that translates between the S2K and RELIANCE implementation will be necessary if a user is building data retrievals. The person accessing the project data base under the TORSDMS system does need some computer experience, however, familiarity with a computer keyboard function keys and data management terms would be sufficient to get started. The use of this manual should allow a computer novice to make data retrievals.

2. GETTING STARTED

2.1 Terminal Constraints

The terminal used must be a Concurrent Model 6312 Display Terminal or a compatible emulator that has 32 function keys and a TAB and SEND key. The SEND and TAB keys and the first 8 function keys are used throughout a typical session. Table 2.1.1 lists these function keys and defines their use in a transaction.

TABLE 2.1.1 - Function Key Actions

Function Key	Action	Explanation
F1	QU	QUIT, return to initial system.*
F2	EX	EXIT, return to initial menu or previous menu when permitted.
F3	EN	END, complete a transaction and return to previous or prior menu.
F4	CA	CANCEL, abandon a transaction and return to previous menu.
F5	HE	HELP screen.
F6	IN	INFO, screen (validity of this key for a particular screen may be determined from the HELP text).
F7	OK	OKAY, to continue to next screen or return from info screen.
F8	OP	OPEN, insert new lines on the Q5 screen of Query, or new lines for Reporter/32.

* Returns to NORIS menu from EASY screens.

The first menu displayed to a user depends upon the security access level of the individual user. The user with the highest access privileges will be shown a system menu with many more selection choices than any other user. For this manual, the system menu shown is the one used by most users.

2.2 Accessing the Project Data Base

The very first step begins upon receiving an Environment Control Monitor (ECM) screen on the terminal. At this point the user types in REL TORS, and a RELIANCE sign-on screen is displayed for logging on. This screen is shown below, in figure 2.2.1.

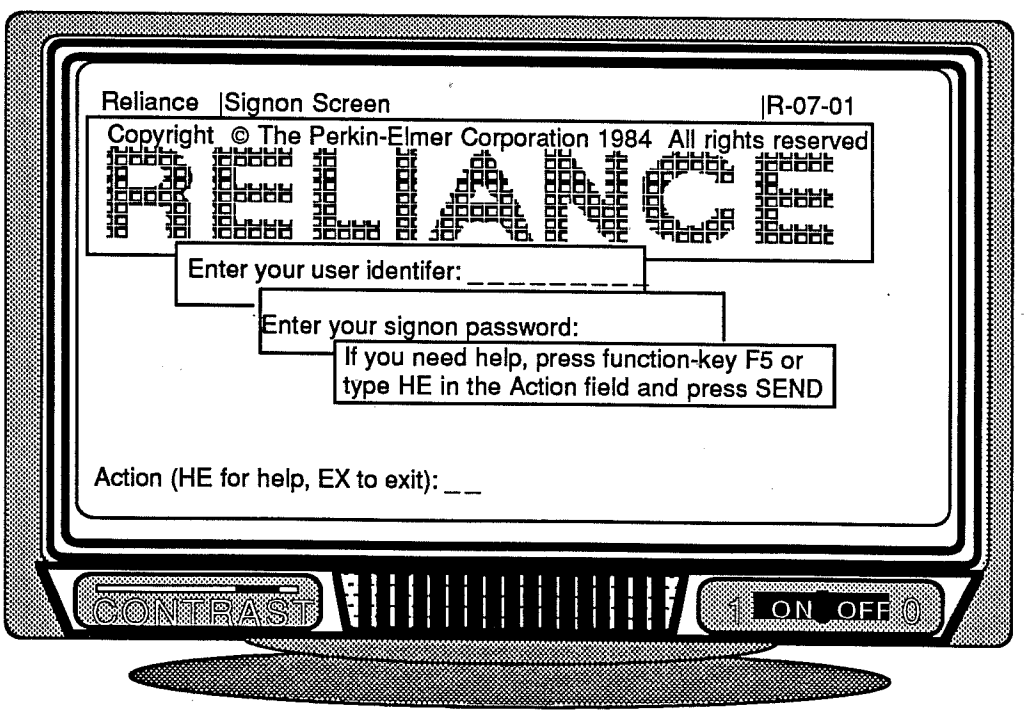


FIGURE 2.2.1 - Sign-on screen.

A Help Information Screen is available before sign on and gives detailed instructions for signing on. After signing on, every screen shown has a help screen which gives further instructions particular to the current screen.

2.3 Logging On

This is a brief step-by-step guide on how to logon to RELIANCE

1. Turn the 6312 display terminal on.
2. At the system prompt (*) of the Environmental Control Monitor startup screen, type REL TORS and press the RETURN key.
3. Type your USER identifier.
4. Hit TAB, type your sign-on password, and then press the SEND key.
5. If the identifier and password are authorized, the initial System Menu will then display. (Figure 2.3.1).

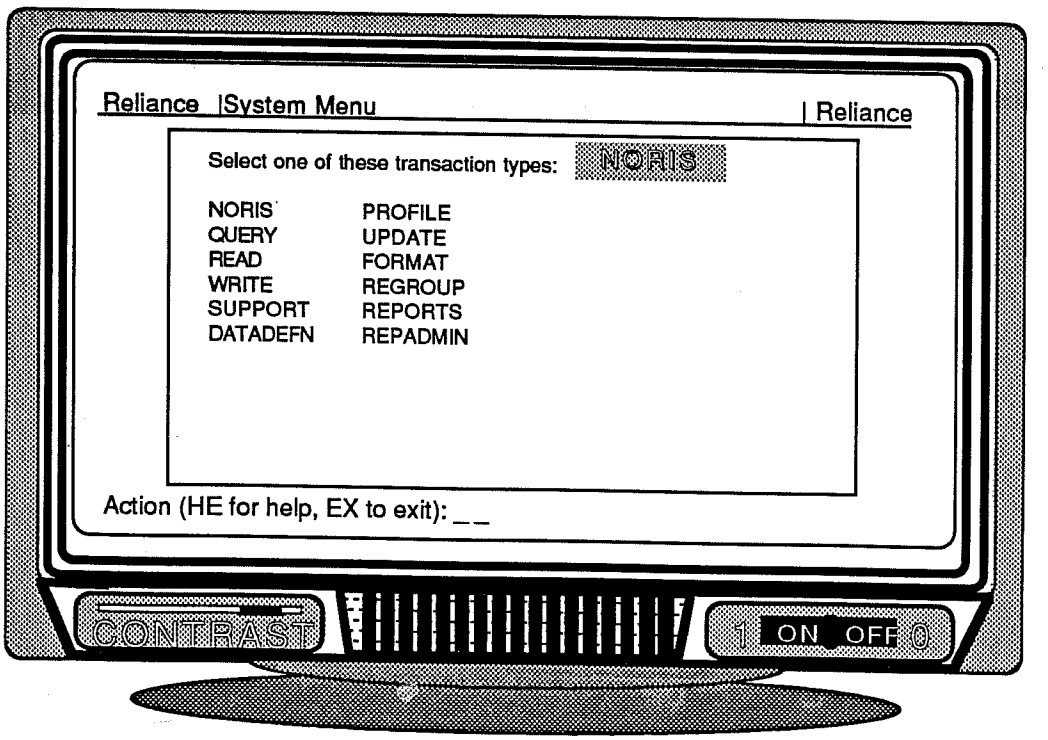


FIGURE 2.3.1 - RELIANCE system menu

6. Choose the desired transaction from the list on the system menu.
7. Type in the transaction (or a unique abbreviation) in the upper right hand corner. If the cursor is not there, hit the TAB key until it reaches the desired area. The TAB key function is similar to an "enter key" in other applications. Cursor positioning keys (←↑→↓) can also be used to move the cursor around.
8. After the selection has been typed in the appropriate area, press the SEND key to complete the transaction.
9. If help is desired, type HE in the Action field and press the SEND key (or use the F5 function key).

The initial System Menu presents a list of transaction names allowed for the user's level of security. A brief description of the transactions shown in figure 2.3.1 follows:

DATADEFN - This transaction will display the Data Dictionary Menu which is used to define a FIELD, GROUP, FILETYPE, DMSFILE, and a DATAVIEW, in that order for any new additions to the Data Dictionary. All of the FIELDS, GROUPS, FILETYPES, and DMSFILES have been defined and implemented for the data base called TORS (PROJ).

QUERY - Displays the Query Menu which is used to define, run, save, and maintain data base retrievals, called Queries. A Query must be based on an existing Dataview. These views can be listed with the F6 and SEND keys at the time of the request and then a selection of a Dataview made.

SUPPORT - Displays a Screen Form Menu which helps a user define a screen form and help text in conjunction with a user written application program.

WRITE - Permits mail message to be written and sent to other users using their identification names.

READ - Permits user to read mail messages addressed to the user when your screen receives an M in the lower right corner.

NORIS - National Oil Recovery Information System designed by NIPER permits special application programs retrieve data.

PROFILE - This screen allows the definition of a profile of selected fields from a dataview which subsequently will be displayed during update.

UPDATE - This screen transaction requests a profile name from the user which contains the fields the user wishes to update. This update will change records in the DMS file corresponding to the Profile/data view selection.

FORMAT - Transaction used to define and maintain a report.

REPGROUP - To define, maintain, and print a report group.

REPORTS - Transaction to run report groups and also gives information as to the status of a running group.

REPADMIN - Screen providing the means for transporting report formats and groups from one RELIANCE database to another.

Two transactions on the system menu for looking at, or retrieving data are: (1) NORIS, which contains multiple application programs, and (2) QUERY. QUERY is the RELIANCE data retrieval routine that is described in Chapter 4.

2.4 NORIS Transactions

One method of retrieving project data is through the transaction NORIS, whose selection is made by typing NORIS into the shaded field area shown in figure 2.3.1. In RELIANCE, any unique abbreviation of a transaction name is permitted as an option for entering the name. In this case, the letter N is unique for the choice of NORIS and may be entered followed by the SEND Key. (NOTE: This manual uses shading to highlight user entry areas and larger type to show a user generated entry.)

The next screen to be seen (figure 2.4.1) shows a list of seven options selectable in NORIS. The first six of the options will each be discussed in detail. The last selection, SEARCH, is not currently active and is reserved for future development needs. NORIS was designed to provide ready-made applications to list data in specific required formats currently used routinely in data base operations.

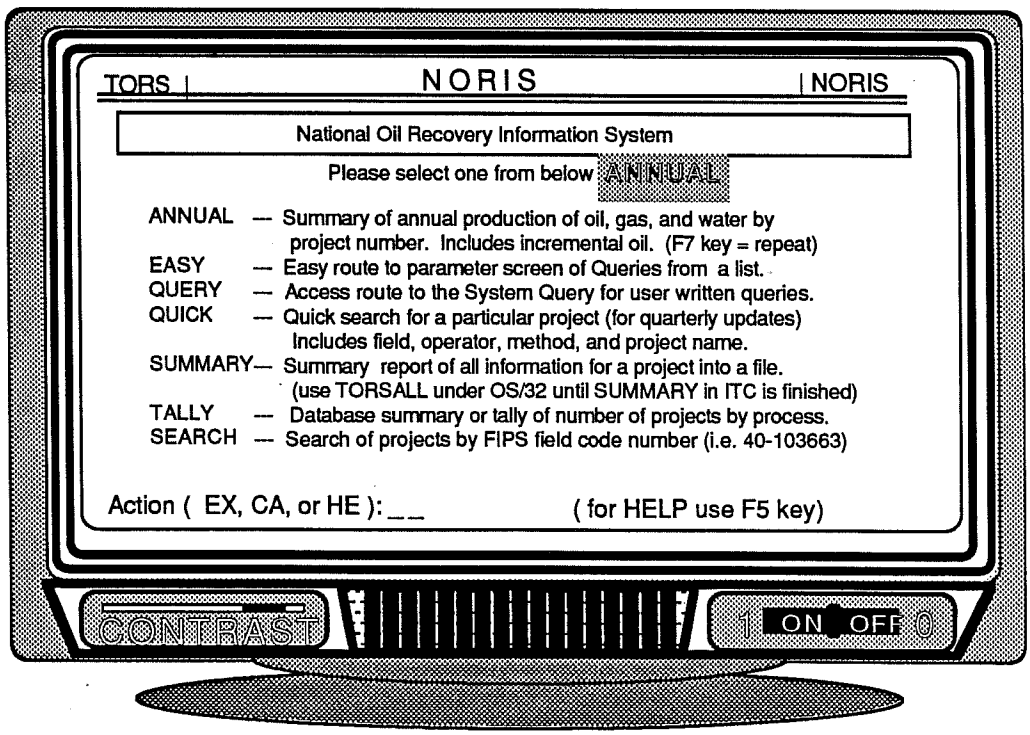


FIGURE 2.4.1 - NORIS selection menu screen.

2.4.1 ANNUAL:

Annual is a transaction to list the annual production of oil, gas, water, and the incremental oil volumes for the projects and years specified in the parameter input screen (figure 2.4.1.1). This allows a user to view production data for a single project or sequential numbered projects for a single year or a range of years. The example shown requests data on project number SF009 for years 1980 to 1983.

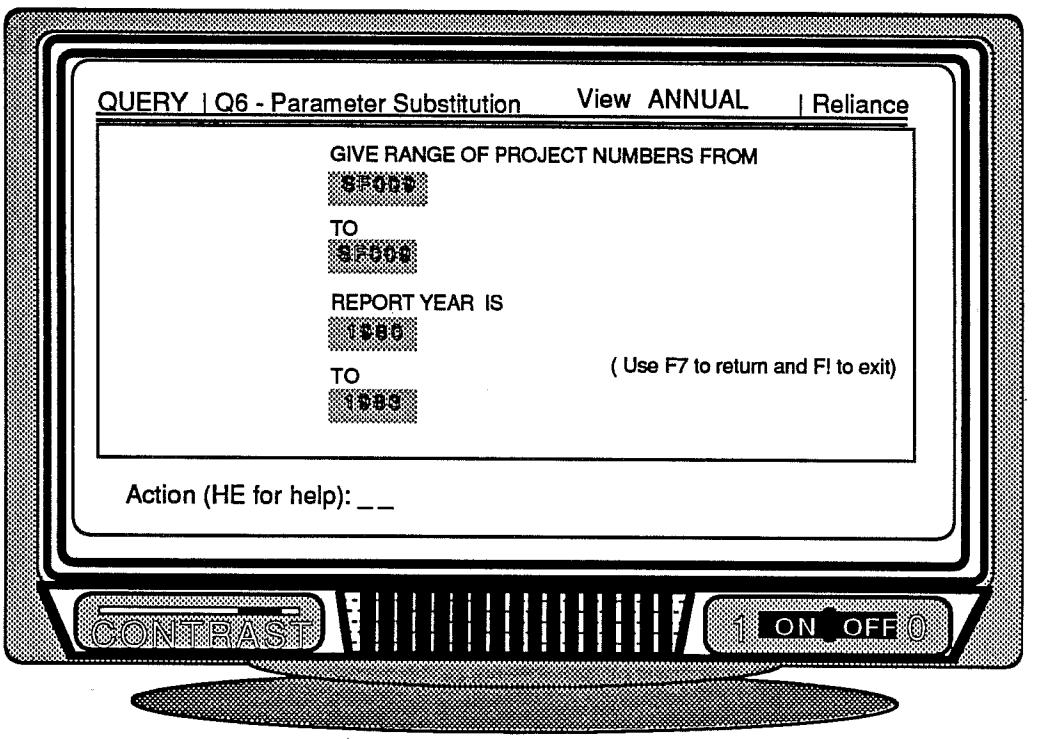


FIGURE 2.4.1.1 - ANNUAL input screen.

Pressing the SEND Key generates the output screen (figure 2.4.1.2) with production records for the three years and statistics (minimum, maximum average and total) for all the production data on the project.

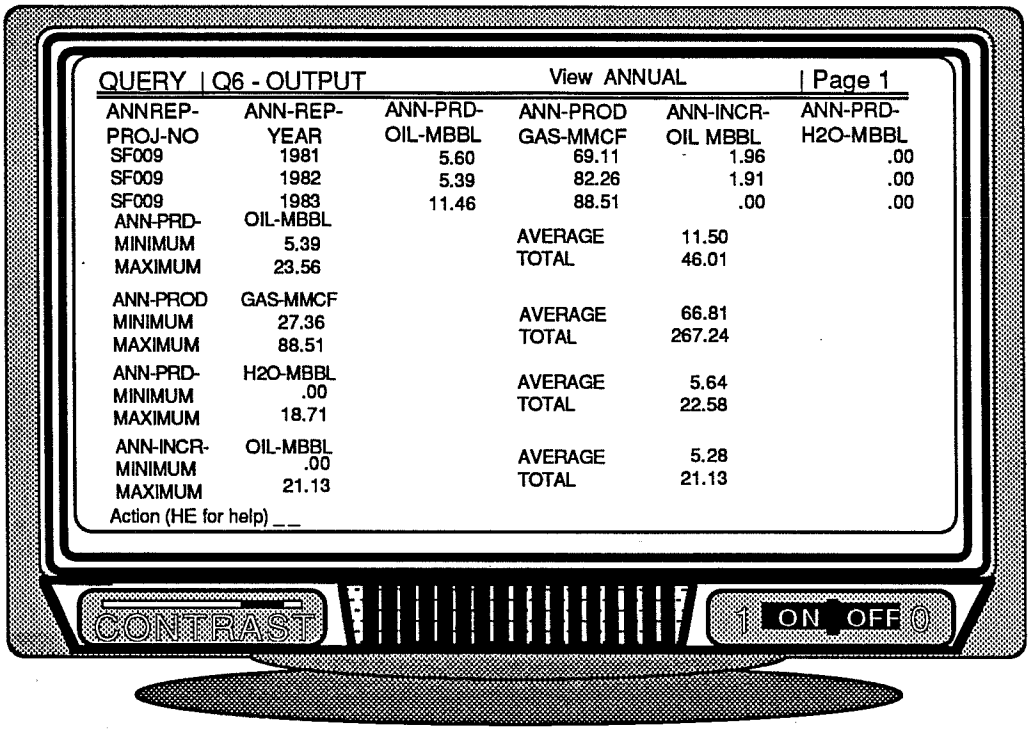


FIGURE 2.4.1.2 - ANNUAL output screen, page 1.

Press SEND again to show the number of records selected. If the output has many screens and you wish to have it printed on the line printer as a report, type in PR in the action field and press SEND. The PR command is only accepted in the transactions of ANNUAL, EASY selections, and QUERY. If you wish to change the project number or report year parameters, then press the Function Key, F7. If you wish to return to the NORIS menu screen, then press the F1 Key at any point.

If the SEND key is accidentally pressed again, instead of the F1 or F7 key, the Query Menu will appear. Do not be concerned. Simply use the F1 key to return to NORIS.

In conjunction with every screen, a "help" screen will be available when the F5 Function Key is pressed or "HE" is typed in the action field. Pressing the SEND Key will return the previous screen again.

In the case of NORIS, the help screen shown below (figure 2.4.1.3) is available for additional explanation of the NORIS transactions.

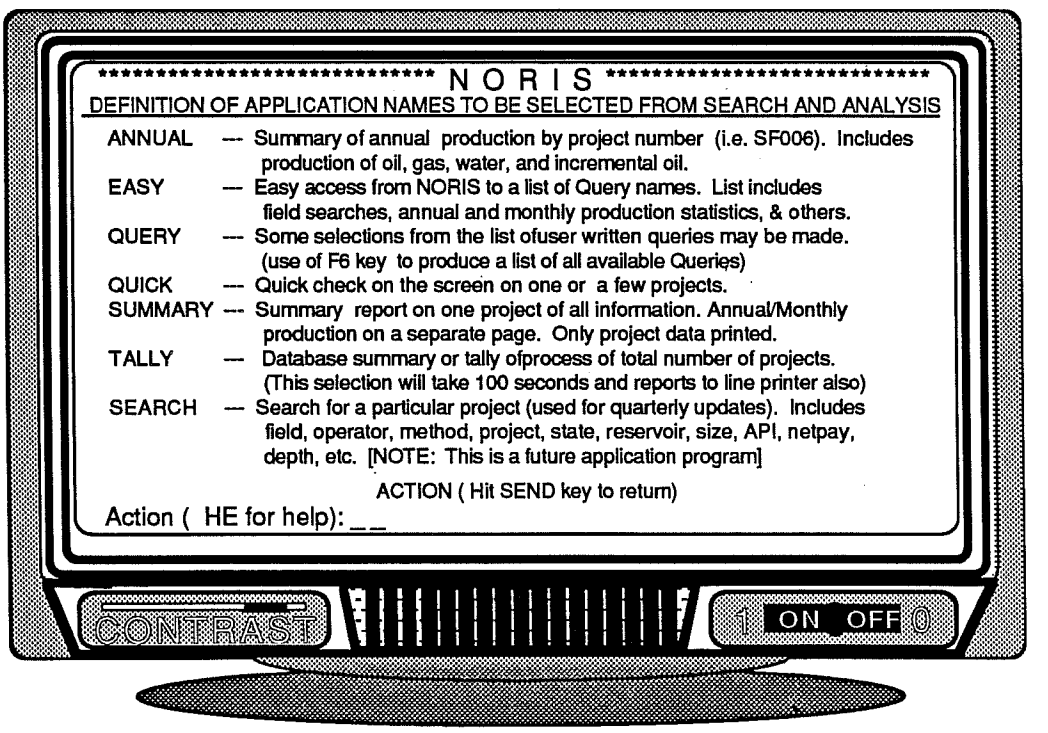


FIGURE 2.4.1.3 - NORIS help screen.

2.4.2 NORIS EASY:

EASY is a user friendly data retrieval transaction that gives the user easy access to prewritten, frequently used data queries. The user selects the EASY route from NORIS menu screen (figure 2.4.1) by typing EASY, or just an E will suffice. The screen which should now be visible to the user (figure 2.4.2.1) has a choice of 17 different queries, or preprogrammed data retrievals. A brief description of the queries follow and a few specific examples of how they can be used.

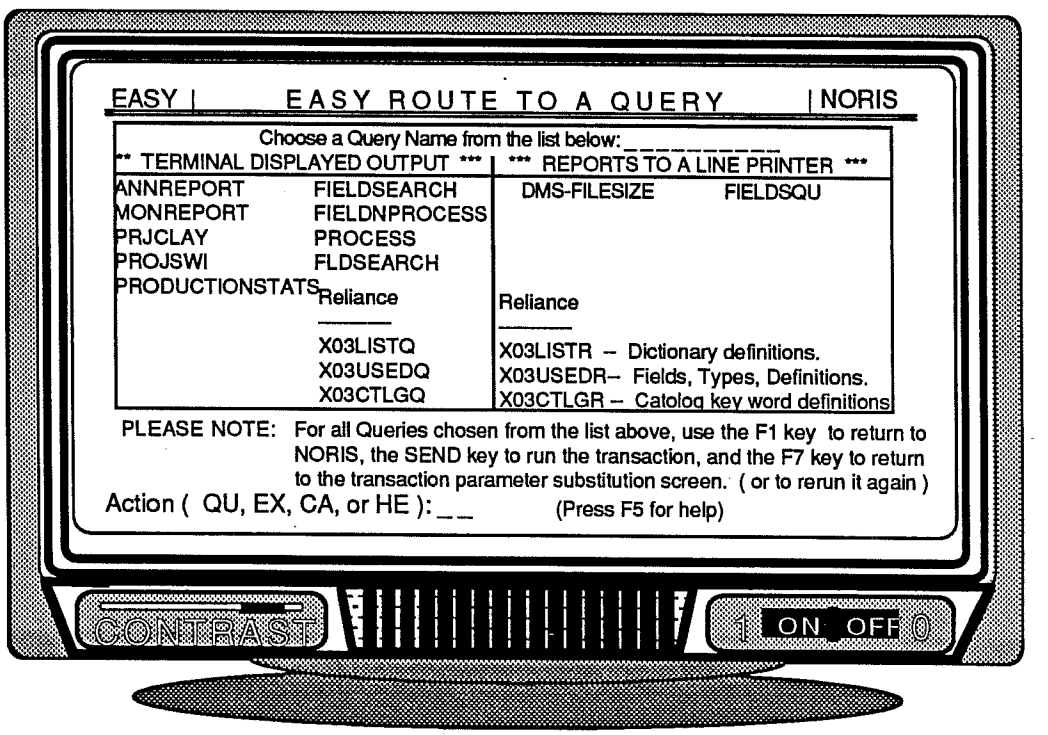


FIGURE 2.4.2.1 - EASY menu screen.

The description of Queries listed in transaction EASY are as follows:

ANNREPORT - Same retrieval as under ANNUAL.

MONREPORT - Selects monthly data by project number and range of project dates.

PRJCLAY - Retrieves project code, FIPS code, clay percent, and lowest permeability for a range of clay parameters.

PROJSWI - Retrieves project project code, process code project OOIP, acres, net pay, porosity, and initial water saturation for a range of SWI.

PRODUCTIONSTATS - Compares the average daily oil production based on annual production with the monthly production in BPD for a single project and year of production.

POIPSEARCH - Shows EOR project start date, code number, original oil, current oil, estimated oil, pattern acres, and process code for a range of current oil in place.

DESCRIBE - Presents a description of each dictionary field based on any datalog key word, such as AGENCY, RESERVOIR, OIL, WATER, LEASE, INTEREST, etc. (See catalog keyword listing XO3CTLGR in EASY.)

FIELDSEARCH - Selects field data by a partial field name, and/or basin code, and/or year of discovery.

FIELDNPROCESS - Using a FIPS code or process code, projects are found giving field code, process code, project number, depth, net pay, initial water saturation, and oil gravity are reported.

PROCESS - Selects a project by a partial process name or process code.

FLDSEARCH - Selects field data from a partial field name.

DMS-FILESIZE - Produces a line printer report of DMS files.

FIELDSQU - Produced a printed report of five selected fields from the dataview FIELDSDV based on DMS file FIELDS.

The next six Queries are a part of the RELIANCE System.

XO3LISTQ - Displays the dictionary definitions on the screen.

XO3LISTR - Prints the dictionary definitions on the line printer.

XO3USEDQ - Displays definitions of the fields and types of the dictionary.

XO3USEDR - Prints definitions of the fields and types of the dictionary on the line printer.

XO3CTLGQ - Displays the catalog key word definitions on the screen.

XO3CTLGR - Prints the catalog key word definition on the line printer.

As indicated before, a help screen for EASY is available with the F5 Function Key or typing "HE". Returning to the EASY menu is accomplished by pressing SEND. The EASY help screen (figure 3.4.2.2) points out the output methods and how the EASY screen can be modified when new search strategies are found. It is likely that some of the search strategies will be found unnecessary and will be eliminated from the EASY list, and other new useful query strategies will be added. Modification of the EASY screen is explained in RELIANCE Manual 46-051, Integrated Transaction Controller (ITC) Screen Form Development Manual, page 3-1.

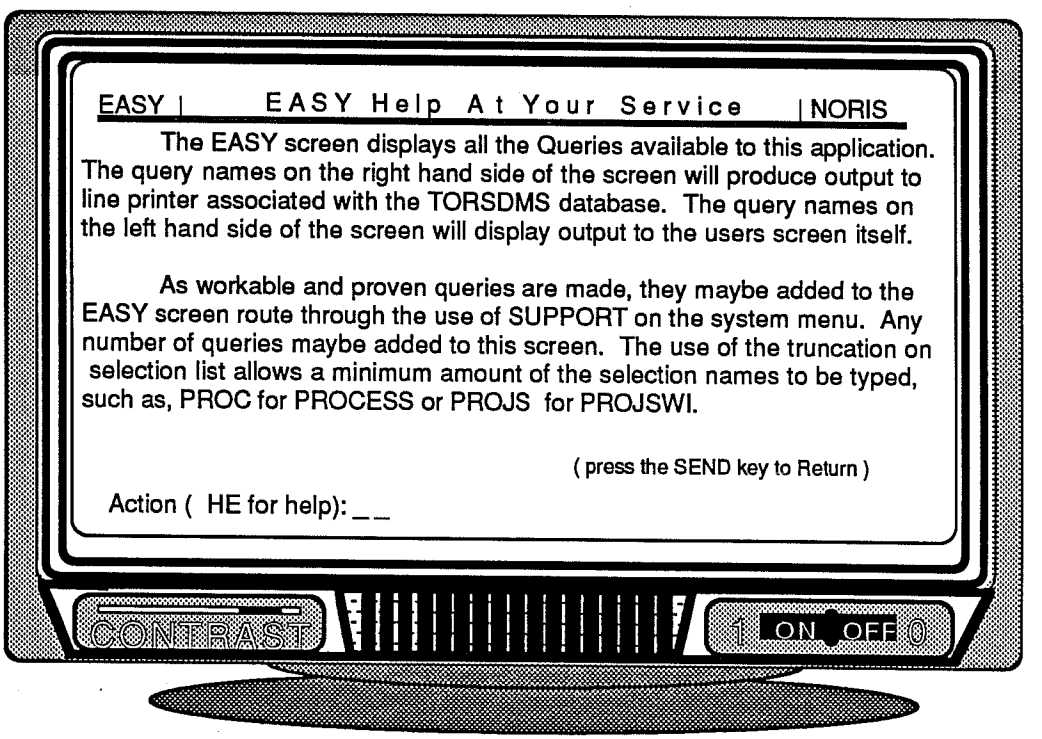


FIGURE 2.4.2.2 - EASY help screen

2.4.2.1 PRJCLAY:

The search for projects limited by clay parameters can be accomplished by selecting PRJCLAY, pressing SEND, and entering the proper clay parameters. A quick search and retrieval are made. Output is a list of project number, clay content, lowest permeabilities, and field code displayed on the terminal screen. They may be printed on the line printer by typing PR in the action field and pressing SEND. This is especially useful when there is more output than the user wishes to look at on the screen.

(NOTE: This search is a protocol for future applications.)

2.4.2.2 PRODUCTIONSTATS:

PRODUCTIONSTATS compares the statistics of the annual reported production figures with the statistics of the reported monthly production figures for a project number.

Select PRODUCTIONSTATS from the EASY Menu list, and enter the project number and the year of production. The resulting output presents a comparison of the average daily production in BPD based on the annual production with the monthly production in BPD.

2.4.2.3 MONREPORT:

MONREPORT reports a project's monthly production figures for given range of dates in terms of year and month. Select MONREPORT and give a project number and range of dates as shown by the default parameters. This could be a long list and you might wish to type PR in the action field as before.

2.4.2.4 PROJSWI:

The PROJSWI transaction supplies a report of all the project numbers, process codes, OOIP, project acres, net pay, average porosity, and initial water saturations for all projects within a given initial water saturation SWI range.

The choice of the PROJSWI transaction will allow the selection of a lower and upper range of initial water saturations. In the example (or default) 0.01 is entered for the lower value of SWI to eliminate projects with no SWI data and 10.0 for an upper limit.

The output screen displays statistics on the OOIP, project acres, net pay, porosity, and initial water saturation over the range of SWI selected.

2.4.2.5 FLDSEARCH:

FLDSEARCH helps the user find a project when partial information is known. The field name or partial field name is entered. Records are selected which list the project number, state, AAPG basin code, and the field name that fit that name. George and/or year of discovery can be used to narrow the output if they are known.

2.4.2.6 FIELDNPROCESS:

The transaction FIELDNPROCESS supplies the project number, depth, net pay, initial water saturation, and oil gravity when either the field code or the process code or both are entered.

2.4.3 NORIS QUERY:

When selection of QUERY is chosen from the NORIS screen, the RELIANCE Query screen is displayed with the RUN operation as the default (figure 2.4.3.1). Press TAB and enter the name of your own or another user written query into the field, as shown below, where it says "enter an old query name." Press SEND. If you do not remember the name of the query you want, press the F6 Function Key for a list of the queries available and the data views to be queried. After running your query, press F7 to rerun the query, or press F1 to return to NORIS.

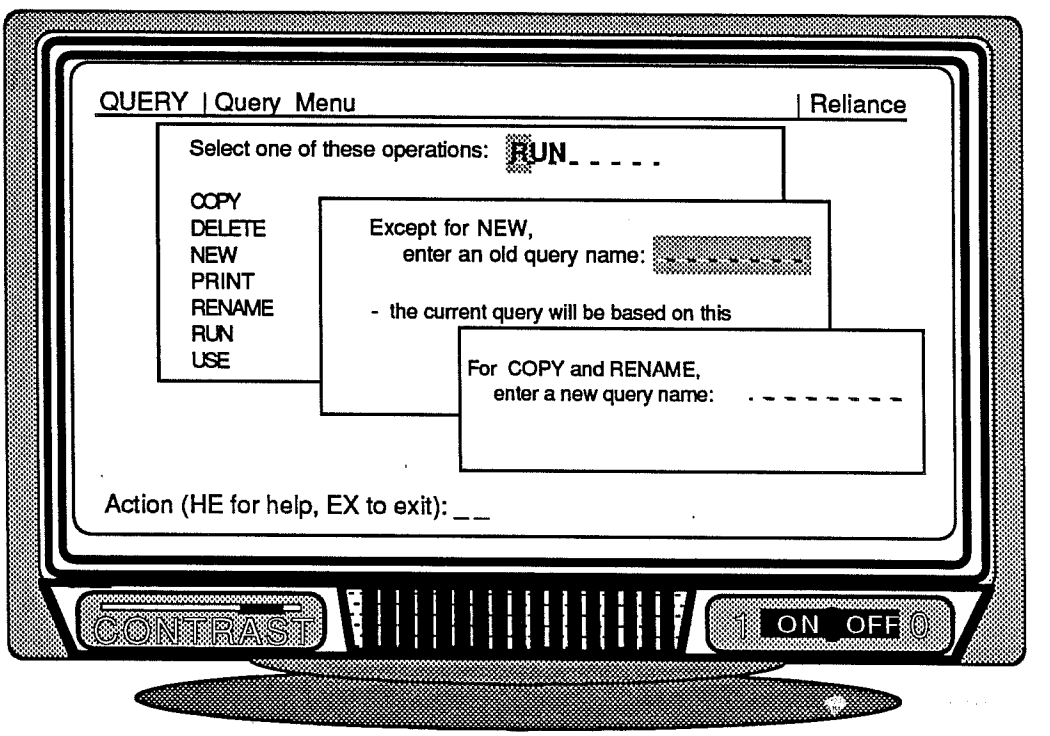


FIGURE 2.4.3.1 - QUERY menu screen.

2.4.4 QUICK:

Up until now, all of the selections, except NORIS itself, have called on the services of RELIANCE's QUERY routine, specifically the Q6 parameter substitution screen. Our next selection from NORIS is based entirely on an application program called QUICK, which utilizes a preprogram screen, or dataview, also called QUICK.

Beginning at the NORIS screen again (figure 2.4.1), enter the selection by typing in QUICK, or QUI as the shortest unique abbreviation, and pressing SEND. The screen for QUICK (figure 2.4.4.1) shows a display without any information in its fields. If the user presses SEND, the first logical record of project information is displayed. Another alternative starting point is to enter the project number for the information sought. As an example, SF020 is entered (figure 2.4.4.1) and the SEND key pressed. The results for SF020 are quickly displayed as shown in figure 2.4.4.2. Repeated use of the SEND Key will sequentially retrieve the next logical record each time the key is pressed. The default search direction is forwards (F). By moving the cursor to the direction field with the TAB Key and typing a B before pressing SEND, the search direction is reversed.

A blind search can be made in either the forward or backward direction by entering any code that approximates the project number sought. A message at the bottom left-hand side of the screen will inform you that the record is not in the database for the code entered. Press SEND again and the next logical project number will be displayed while moving in the direction indicated by the search direction field.

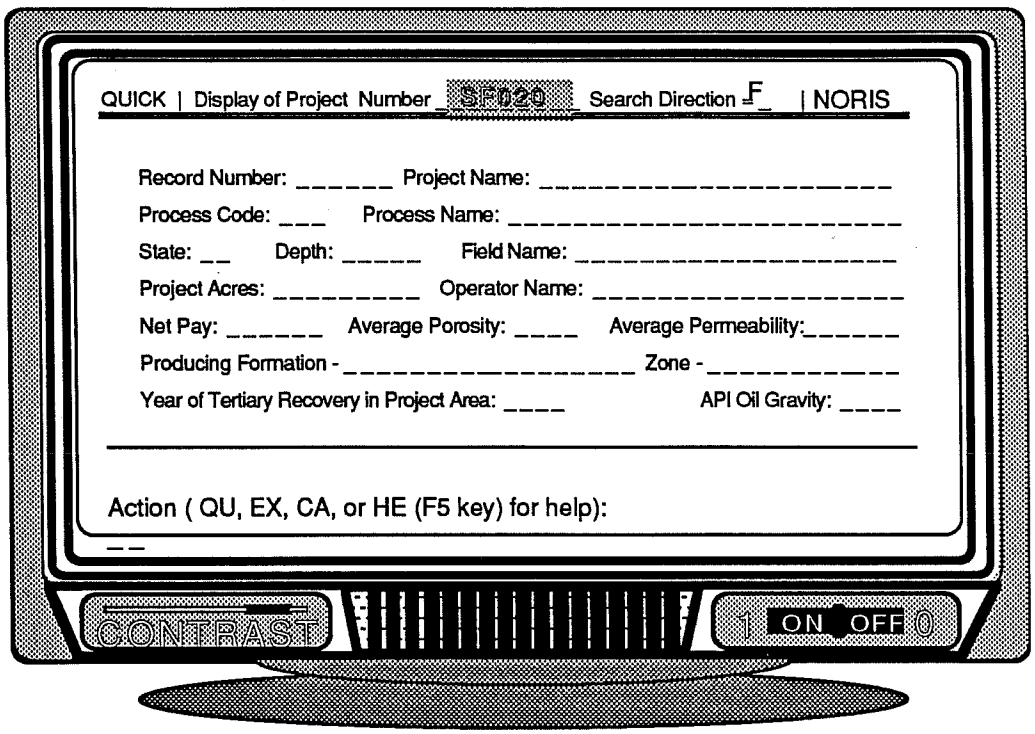


FIGURE 2.4.4.1 - QUICK input screen.

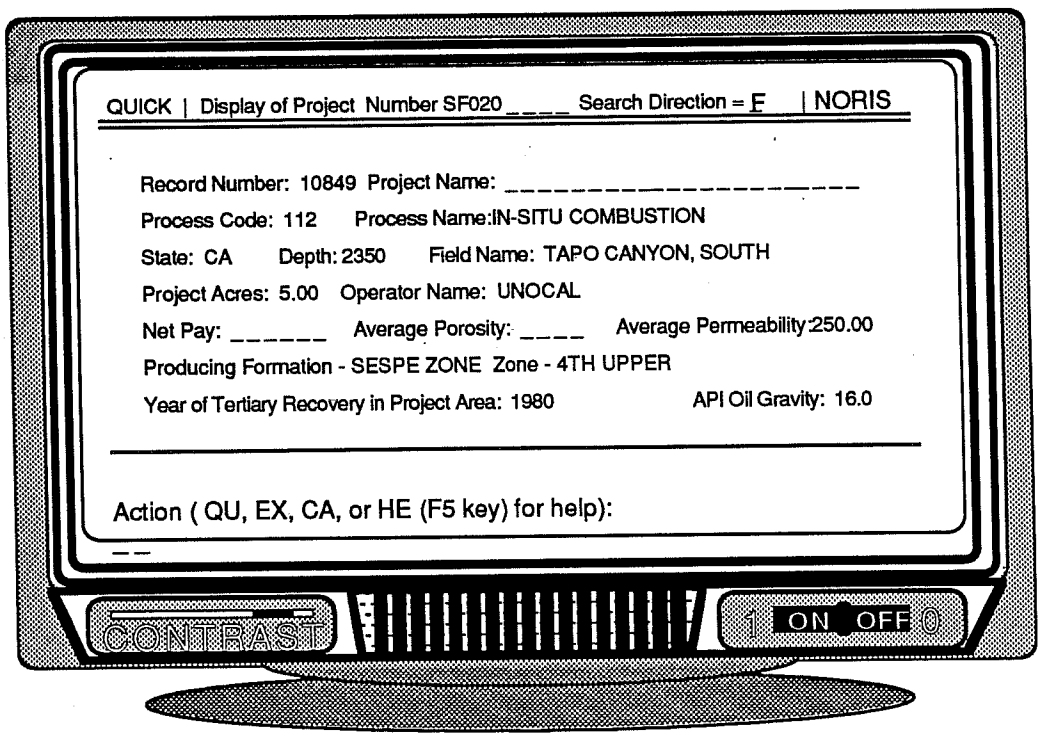


FIGURE 2.4.4.2 - QUICK output screen.

At any time during the use of the QUICK screen and application program, a HELP screen is available merely by pressing the F5 Key or typing "HE" in the action field at the bottom of the screen (figure 2.4.4.3).

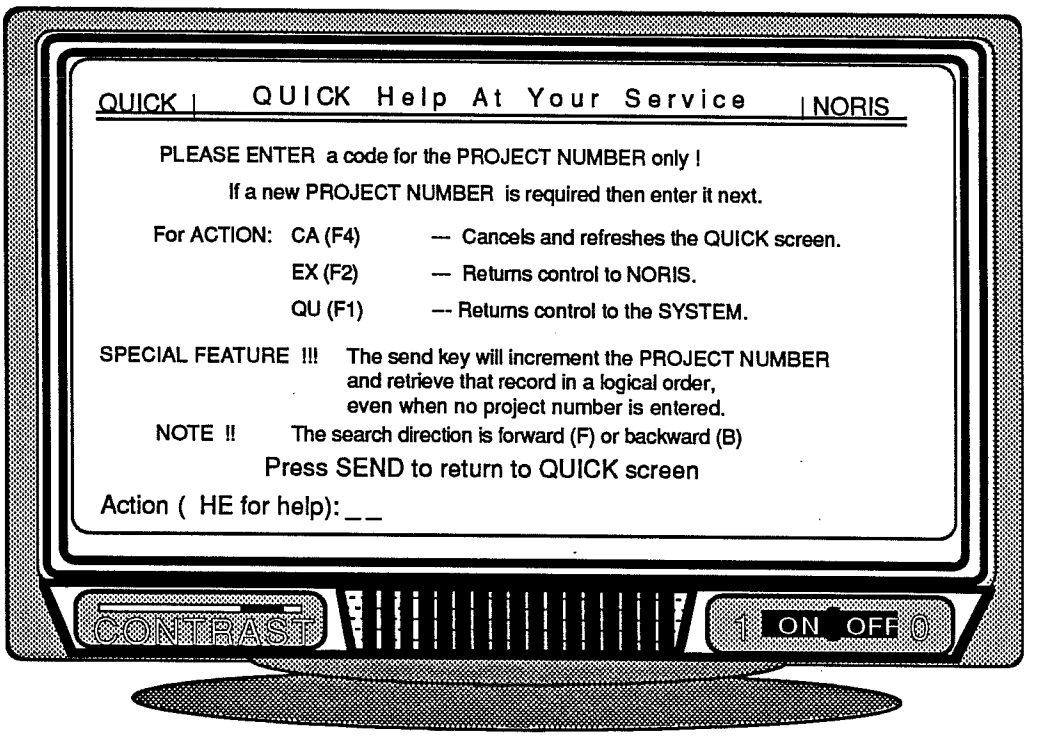


FIGURE 2.4.4.3 - QUICK help screen.

2.4.5 SUMMARY:

SUMMARY is an advanced feature to be used only by those users familiar with the Concurrent operating system as it lists the complete information on any one project. A request for the project number is made by the screen shown in figure 2.4.5.1. Authorized persons can obtain a complete listing of the data base by entering "ALL" and the appropriate password. Since this will result in a massive printout, this feature should be rarely used.

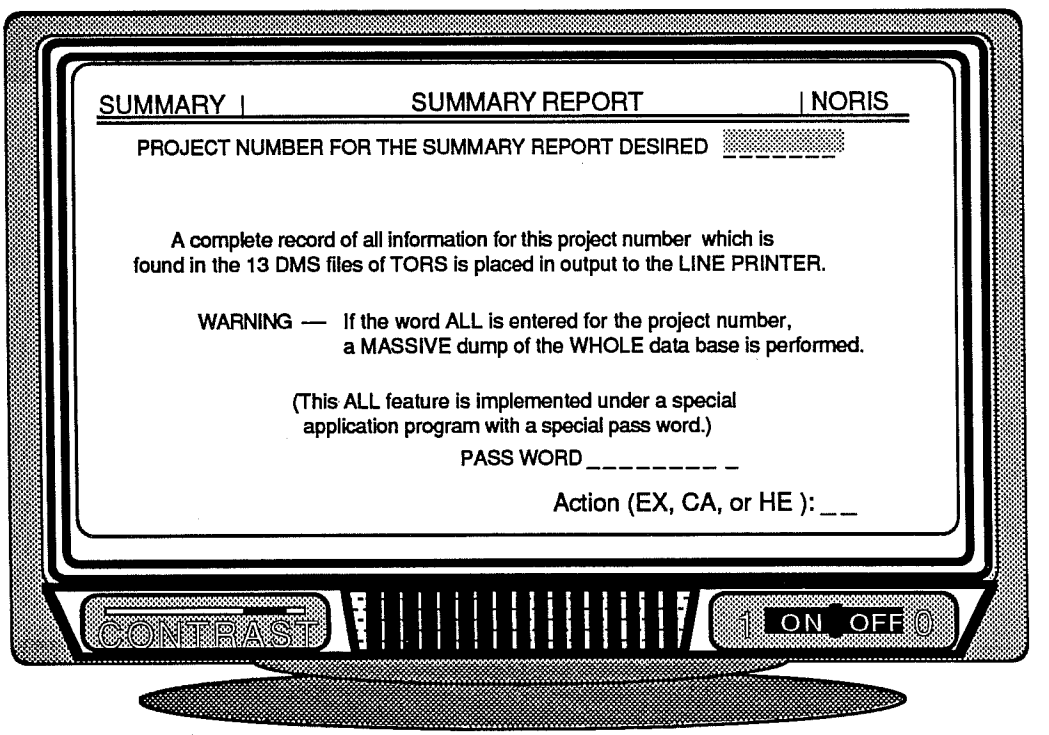


FIGURE 2.4.5.1 - SUMMARY input screen.

Pressing the F5 Function Key or typing HE into the action field at the bottom of the SUMMARY screen will provide a SUMMARY help screen to aid in selecting the project number and to give more information regarding the ALL feature (figure 2.4.5.2).

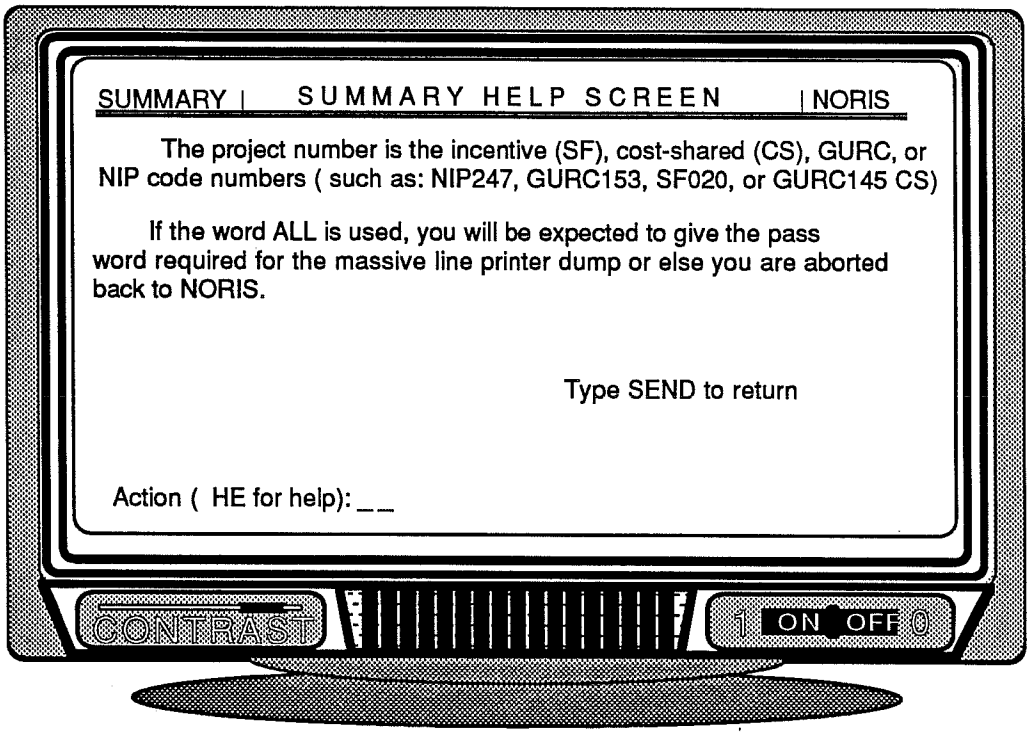


FIGURE 2.4.5.2 - SUMMARY help screen.

2.4.6 TALLY:

The last active selection from the NORIS screen is an application program called TALLY. TALLY lists the number of projects to be found under each individual process code and lists their process names.

There are two screens in TALLY, the first requires about 100 seconds before the screen is displayed. By pressing SEND, a second screen will quickly follow listing the remaining tally in numerical order to the process code. The next SEND Key returns the NORIS screen. A copy of each screen for the tally will be printed on the line printer.

The two output screens resulting from the selection of TALLY are shown in figures 2.4.6.1 and 2.4.6.2.

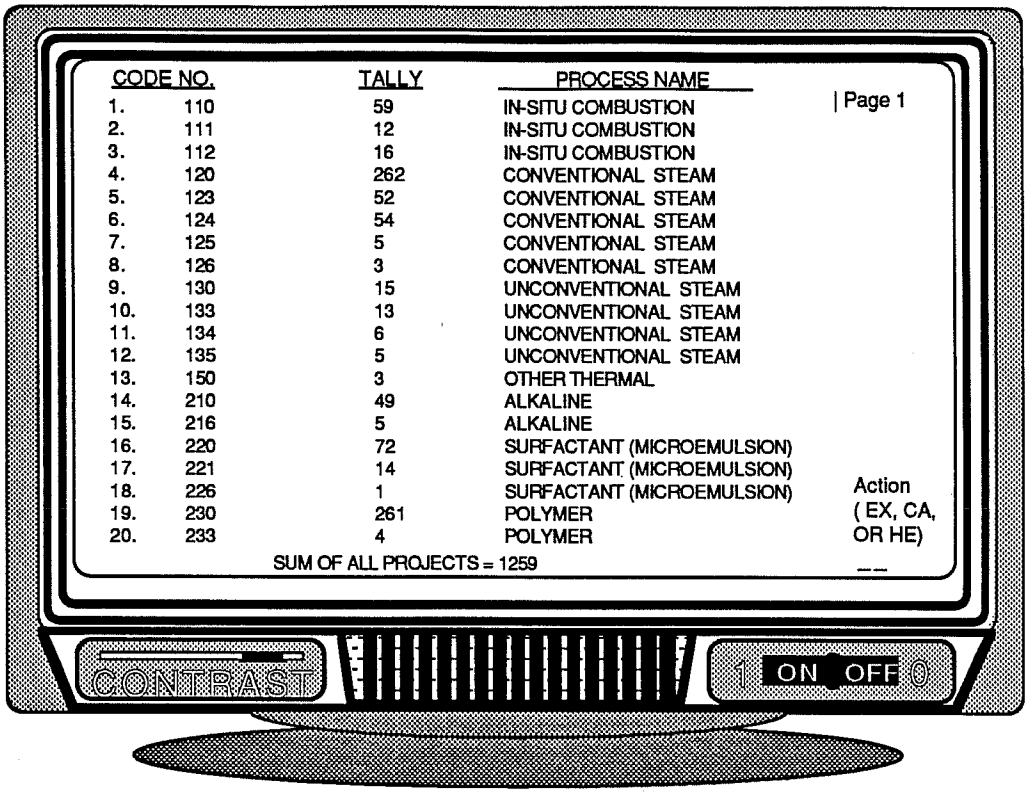


FIGURE 2.4.6.1 - TALLY output screen, page 1.

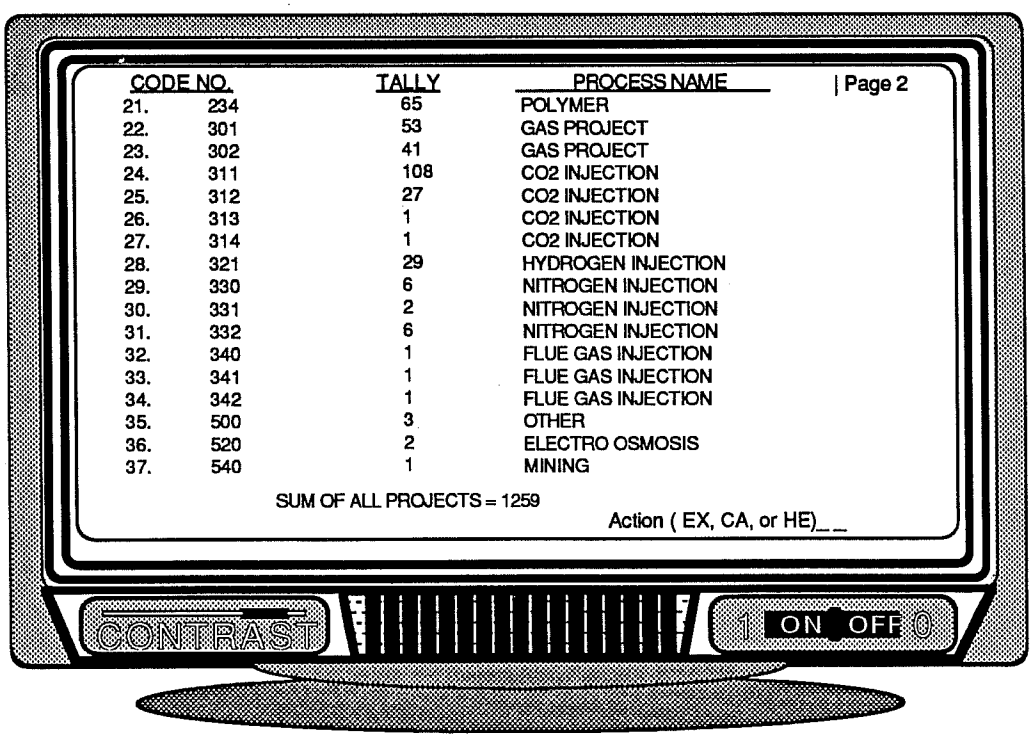


FIGURE 2.4.6.2 - TALLY output screen, page 2.

Pressing the F5 Function Key will bring up a Help Screen for TALLY just as with other selections (figure 2.4.6.3), except the TALLY Help Screen is available only after the first output screen is shown.

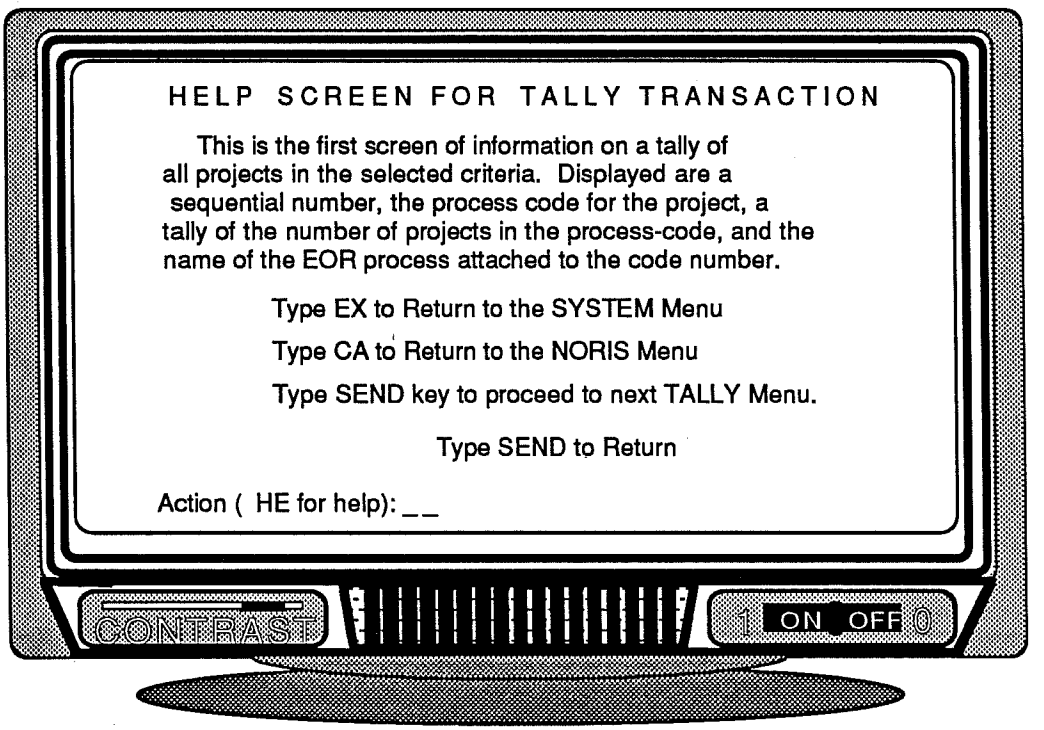


FIGURE 2.4.6.3 - TALLY help screen.

2.5 Security System

2.5.1 User Security Level

Assignment of many different security levels is possible for the TORSDMS database.

Implementing a multi-level security is the option of the TORIS program manager. Its implementation will be discussed when appropriate.

2.5.2 User Identifiers

A user identification name is authorized and issued by the TORIS program manager. This user-id name is unique and must be accompanied by a password.

2.5.3 User Passwords

A unique password is mandatory for every user identification name installed. If the two do not match, that is, the password with the user-id, then a message will indicate failure in the lower left hand part of the screen.

3. THE DATABASE STRUCTURE

3.1 Creation of TORSDMS

The TORSDMS data base was created by the RELDEF transaction of RELIANCE. There are two methods to create a RELIANCE data base. The first method is to define a new data base by use of RELDEF transaction from interactive (ITC) RELIANCE. The second method requires the use of the system console. At the console, the database administrator issues the DMSDEF command and appropriate parameters. The ITC definition for TORS is detailed in appendix 8.2.

3.2 Method of Loading Data Into TORSDMS

Data may be loaded into a RELIANCE data base by a user written program or the use of the DMSLOAD utility issued from any user terminal under OS/32. DMSLOAD was used to load data into TORSDMS. Whichever method is used, the input files must correspond to the data dictionary. The input files must match the data dictionary exactly in two areas:

1. The length of each field in a record must match the data dictionary length declared for a field (in bytes).
2. The order of the fields must match exactly the order as declared by the group of a DMS file.

Data were extracted from SAS System 2000 DBMS into "flat" (ASCII) files. These files were then manipulated to match the declared data dictionary and then loaded into TORSDMS.

3.3 Data Dictionary

The data dictionary is one of the most important components of RELIANCE. It allows the user to define and document completely a RELIANCE database, create DMS files, dataviews, and queries. The complete data dictionary is in appendix 8.3. Page 8-3 to 8-11 cross references the RELIANCE data dictionary

name within each DMS file to the data elements in the S2K implementation. Page 8-12 to 8-18 lists the fields, field types, group names, field lengths by DMS file. Page 8-19 to 8-20 lists the primary and secondary key fields by DMS file. All of these terms will be defined next.

At the lowest level, the Field is the most elemental piece of data in the data dictionary. The user may then create DMS file definitions by the following steps:

1. Fields are combined into groups.
2. Groups are combined into file types.
3. File Types are combined into DMS files.
4. DMS files are then used to create dataviews.

The Field defines basic attributes of the data. These attributes are: name of field, field type, field length, optional sign, number of decimal places, an edit picture for RQL/32, and a field title for RQL/32.

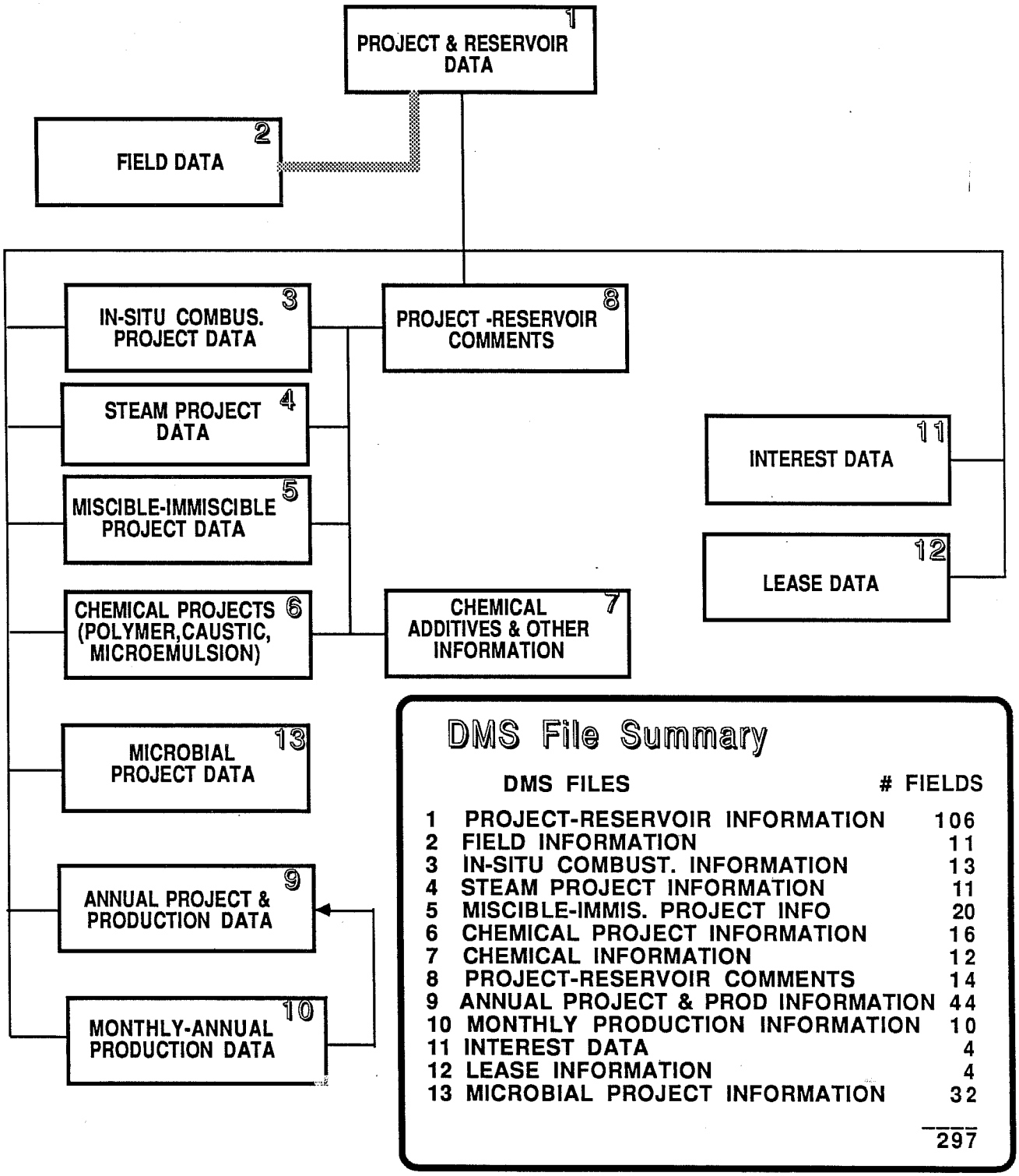
At the most elemental level, a group is a combination of fields. A group may also be a combination of different groups or a mixture of groups and fields. Ultimately, there may be only one group definition used in the creation of a File Type. Some attributes of a group are as follows: a group name, field names, order of occurrence of fields, and local names (which may be different from the field names).

The File Type defines all indices and records for the DMS file. Previously, the user must have created one group that will be used as the group defining record for the File Type definition. All primary and secondary indices are defined with the name of the key field making up each index.

A DMS file may then be created from the previously defined File Type. Some attributes of a DMS file are as follows: DMS file name, maximum number of records for the initial extent (primary placement area), and an optional

password to restrict access. After the DMS file has been defined it may then be implemented. Implementation creates a new DMS file in the contiguous area designed for the DMS/32 database. Figure 3.3.1 shows the file structure of the current implementation of the PROJ data base along with the number of fields in each file.

FIGURE 3.3.1 - RELIANCE structure of the EOR project database PROJ.



4. RELIANCE ROUTINES

The computer routines of RELIANCE's are used to specify transactions. Transactions range from a simple screen retrieval from one DMS file to data retrieval, calculation, update, and data replacement. These transactions are done through "Dataviews". A Dataview creates a logical definition of data from one to four DMS files. There are two types of dataviews: simple and composite. A simple dataview consists of only one DMS file. A composite dataview consists of two to four DMS files joined by a common field. Dataviews are used by RQL/32 in the creation of queries.

The DATADEFN transaction type (figure 4.1.1) is used for the creation of each of the components of the data dictionary. For a complete explanation of the data dictionary, please refer to the manual entitled 'DATA DICTIONARY' numbered 48-274 F00 R00, chapters I through III. Appendix 8.3 contains a complete listing of the all user defined DMS files comprising TORSDMS, all Groups and File Types and their associated fields, all primary and secondary keys. Appendix 8.4 contains listings of all dataviews.

4.1 Creation of a Dataview

Help may be obtained at any time by pressing the F5 Function Key or typing "HE" in the Action entry and reading the help text. When finished with HELP, press SEND to return to the System Menu. Function Key F2 will exit to the System Menu while F4 will cancel the transaction and return to the prior menu.

1. From the System Menu, select by typing in the "DATADEFN" transaction and press SEND (figure 4.1.1).

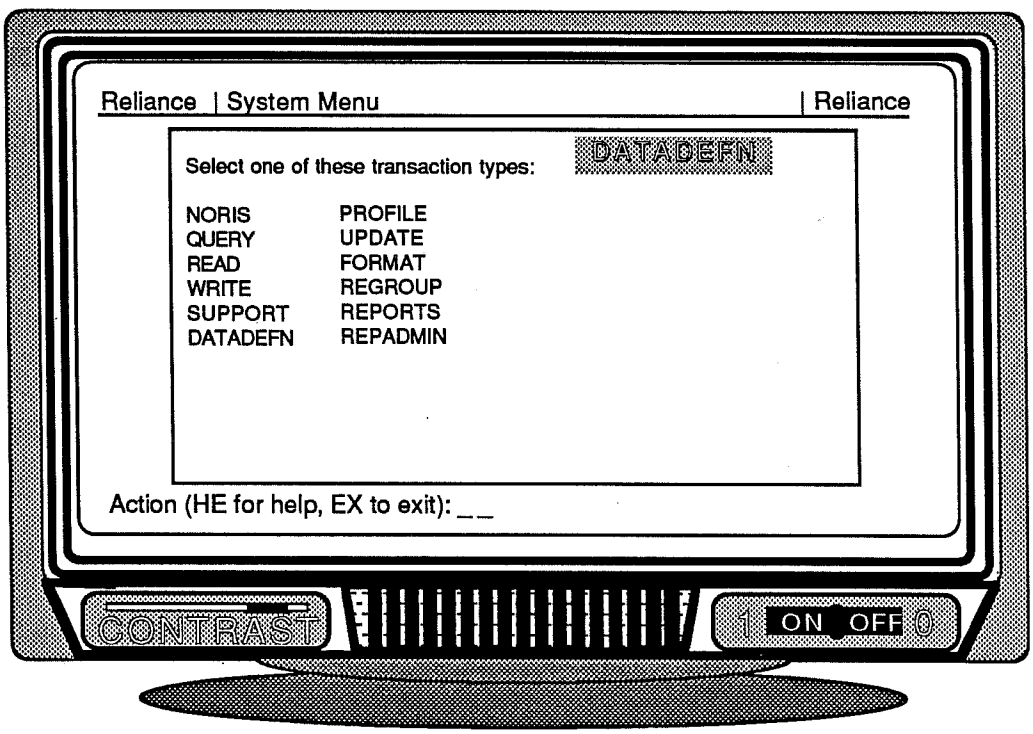


FIGURE 4.1.1 - RELIANCE system menu.

2. The data dictionary menu (figure 4.1.2) allows the user to select the definition type from a list on the screen. From this list select the "DATAVIEW" transaction and press SEND.

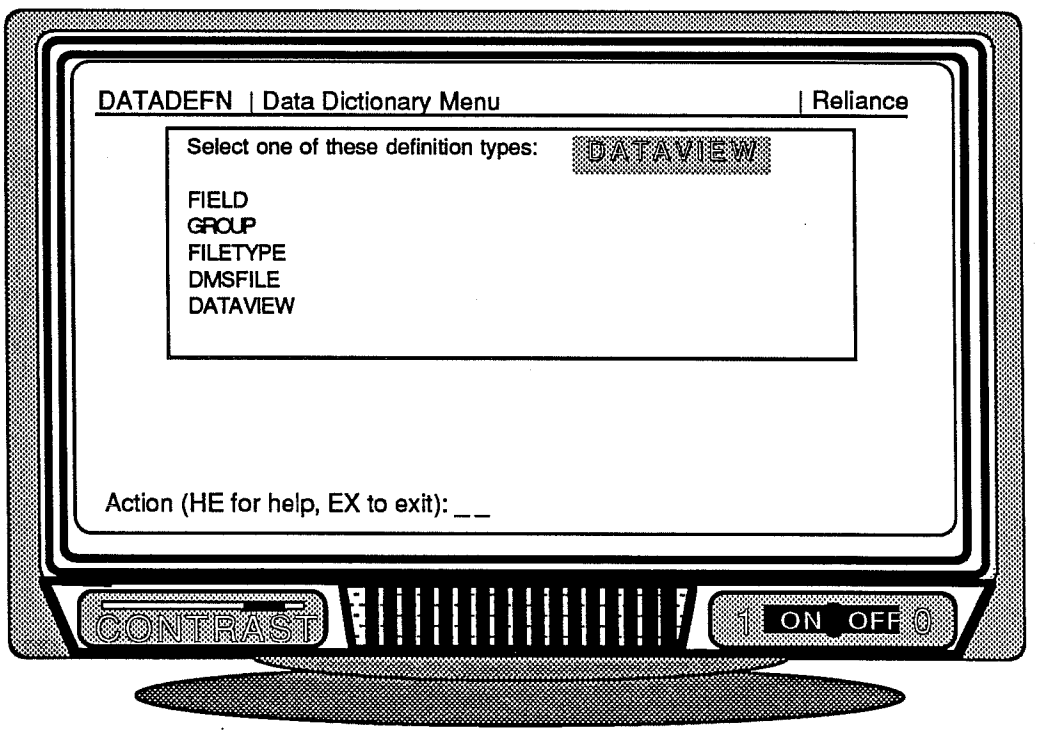


FIGURE 4.1.2 - Data Dictionary menu screen.

For detailed information, refer to the "Data Dictionary Reference Manual" RELIANCE Manual 48-035, pages 2-33 through 2-34. If necessary, the user can press the F4 Function Key to cancel the transaction or F2 to exit back to the System Menu.

3. On the Dataview Menu (figure 4.1.3), there are three questions the user can answer. The first two are mandatory, but the third is optional. First select CREATE, the cursor will automatically tab to the next field. Now enter the new dataview name "FIELDEXPDV" and press SEND.

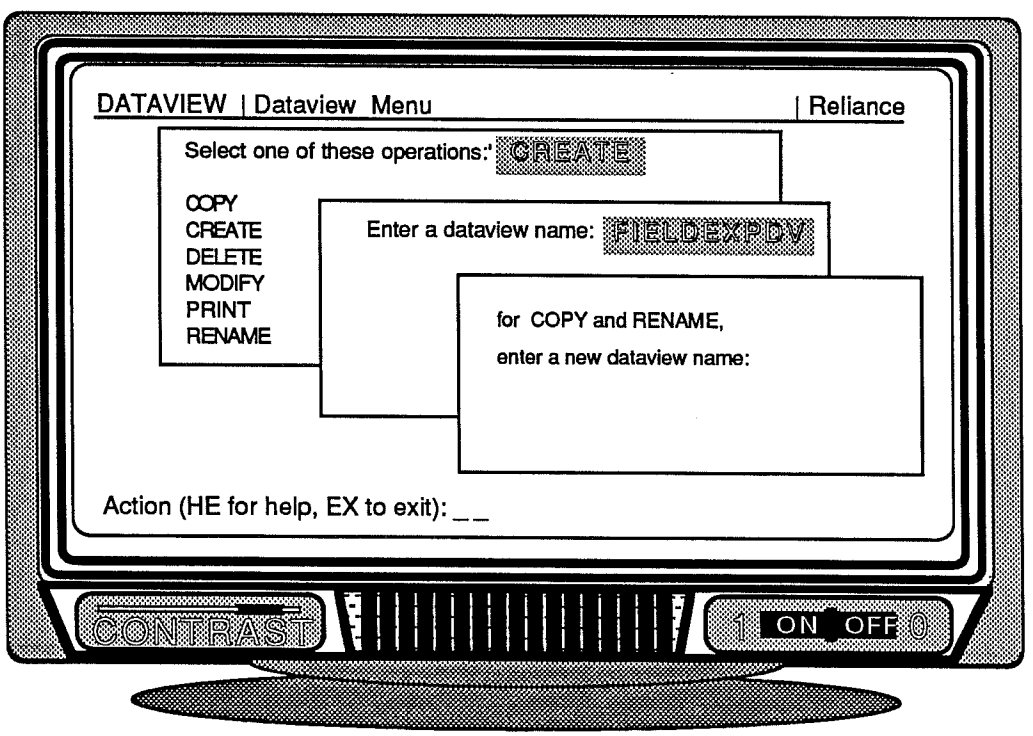


FIGURE 4.1.3 - Dataview menu screen.

For a detailed explanation of this screen, refer to the "Data Dictionary Reference Manual" pages 2-35 through 2-36.

4. The File Specification Menu (figure 4.1.4) allows the user to choose a DMS file (simple dataview) or multiple DMS files (composite dataview). Enter "FIELDS" and press SEND. A level of security can be added by assigning a password. Also, more complex dataviews can specify up to four DMS files. The user should refer to the RELIANCE manuals before doing more complex dataviews.

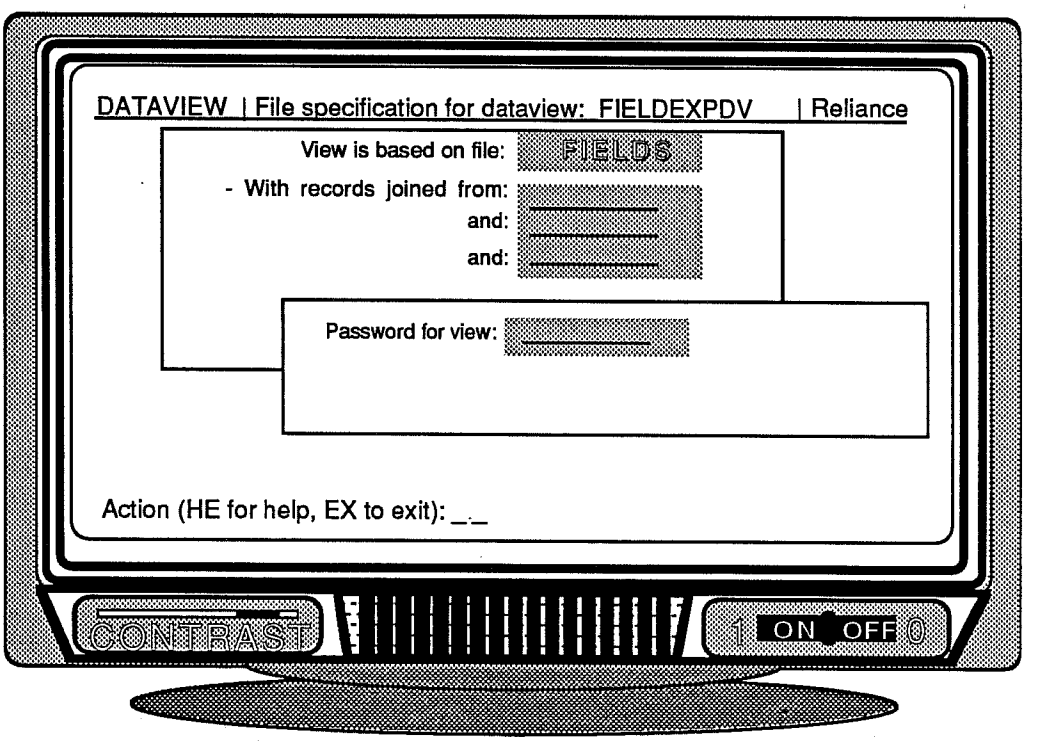


FIGURE 4.1.4 - Dataview file specification screen.

For a detailed explanation of this screen, refer to the "Data Dictionary Reference Manual" pages 2-38 through 2-39.

5. The Field Selection Menu selects fields from the specified DMS file that will be used by the dataview (figure 4.1.5). In the column titled "Select?" overtype the "N" with a "Y". Press the Tab Key after each "Y" until the "Select?" column is reached. Press SEND after the last "Y" is typed. For the example dataview, all of the fields in the DMS file have been selected with a "Y". The protect feature is discussed in the RELIANCE "Data Dictionary Reference Manual" pages 2-40 through 2-41 in their discussion of the field selection screen.

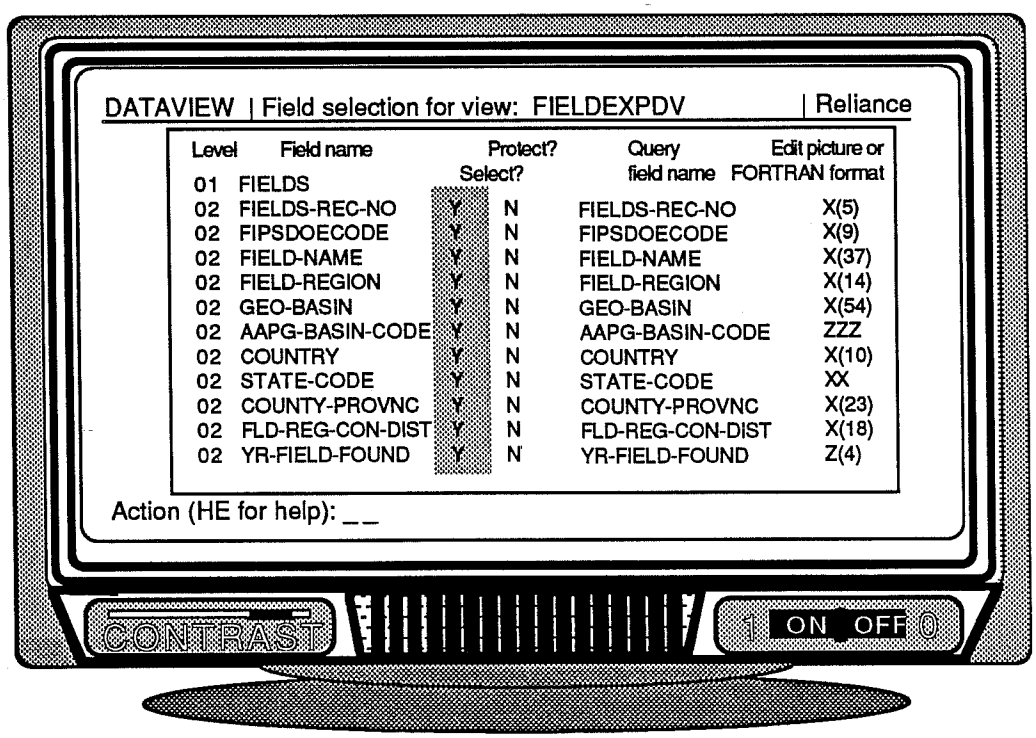


FIGURE 4.1.5 - Dataview field selection screen.

6. The final screen is the Arithmetic Definition Menu (figure 4.1.6). This screen is used to define calculations made for a dataview. Since this dataview does not have any calculations, it is not used. The "Data Dictionary Reference Manual" describes how to use this feature. Press F3 Function Key to finish. The Dataview Menu is then displayed. Press the F2 Function Key to return to the Data Dictionary Menu. From this menu press the F1 Function Key to reach the System Menu. The creation of dataview FIELDEXPDV is now complete.

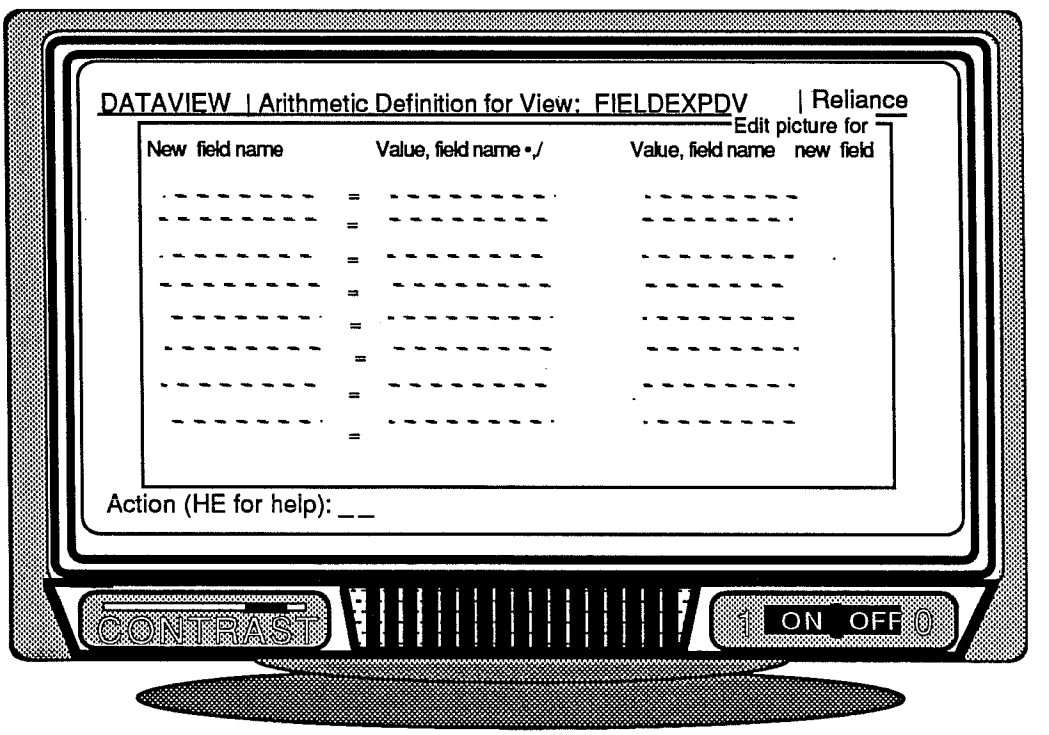


FIGURE 4.1.6 - Dataview arithmetic definition screen.

4.2 Relational QUERY language (RQL/32)

RQL/32 is the Query language of the RELIANCE data system. However, RQL/32 does not use a procedural computer language (e.g. FORTRAN, etc.). All the necessary information is supplied by the completion of RELIANCE screen forms. For a complete explanation of the Query transaction type, please refer to the manual entitled "RELATIONAL QUERY LANGUAGE/32 (RQL/32)" numbered 48-277 FOO ROO chapters 1 through 5.

There are three steps in the creation of a query:

1. Select the view (previously created by the DATADEFN transaction).
2. Choose the desired fields from the dataview.
3. Specify any conditions for the Query.

RQL/32 will produce output to the screen or will create a printed report. The user has the option of saving any query created for use at a later date.

After the choice for the QUERY transaction has been made, the Query Menu (figure 4.2.1.2) is displayed. At this point the user may choose the type of operation desired. If the user is creating a new Query, the Q1 - View Selection screen (figure 4.2.1.3) is displayed. The user then must choose a dataview for the Query. After the view has been selected, the Q3 - Display Request screen (figure 4.2.1.4) is displayed. The user then must select the fields to be displayed from an alphabetical listing of all fields in the dataview. At this point the Q5 - Selection Condition screen (figure 4.2.1.5) is displayed. On this screen, the user must specify conditional parameters for the selected fields of the dataview. The query now has all the necessary information to execute. RQL/32 will search the database for the selected data and output the data as the user has previously specified on the Q1 - View Selection screen.

4.2.1 Creation of a Query

1. From the System Menu, select by typing in the "QUERY" transaction and press SEND (figure 4.2.1.1).

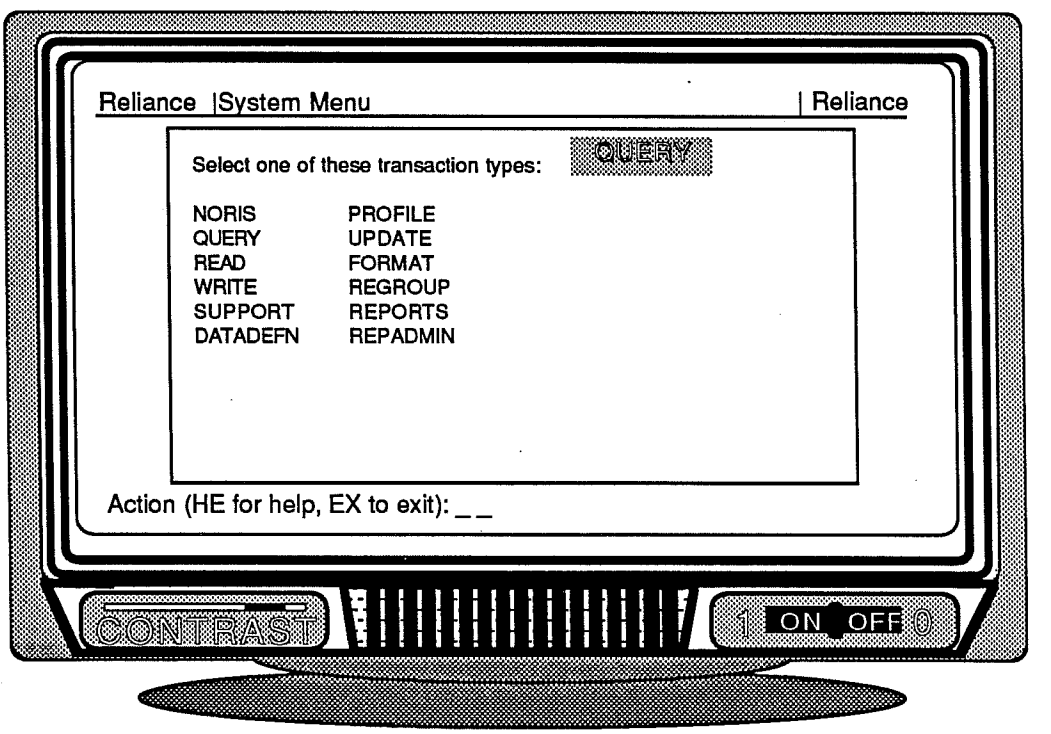


FIGURE 4.2.1.1 - RELIANCE system menu.

The F6 Function Key may be pressed to obtain a listing of all current queries. If this list is viewed, press the SEND Key to return to the Query Menu. For a detailed explanation of this screen, refer to the "Relational Query Language (RQL/32) User Guide" pages 5-4 through 5-5.

2. On the Query Menu (figure 4.2.1.2) there are four selection areas the user can use. The default NEW of the first selection area is appropriate for this Query. Press SEND to continue to next Menu screen.

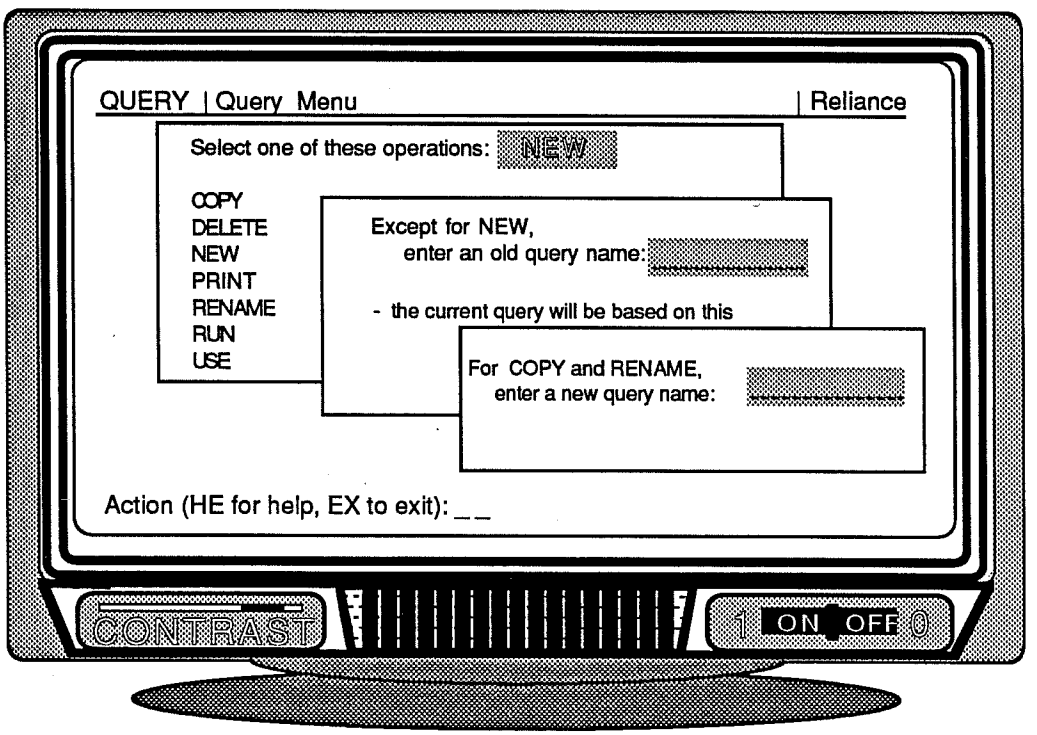


FIGURE 4.2.1.2 - QUERY menu screen.

The F6 Function Key may be used to obtain a list of all dataviews. For a detailed explanation of this screen, refer to the "Relational Query Language (RQL/32) User Guide" page 5-6.

3. The Q1 - View Selection Menu (figure 4.2.1.3) allows for the selection of a pre-existing dataview. The dataview to use for this Query is "FIELDEXPDV" which was built in section 4.1. Press SEND to continue to the next Menu screen.

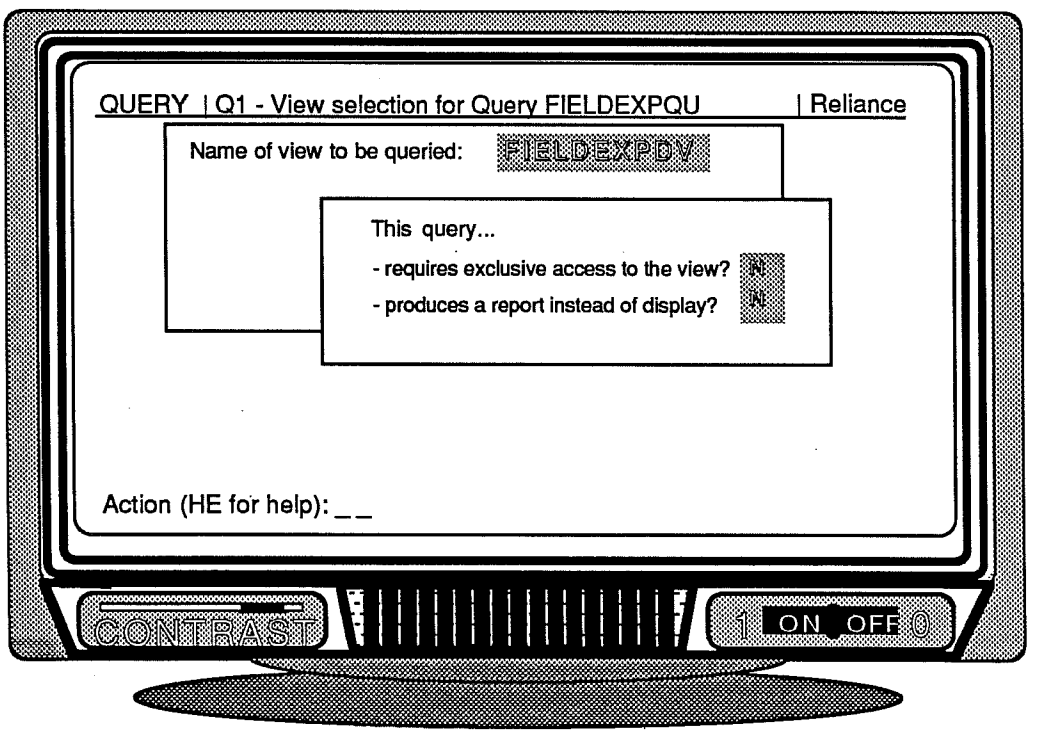


FIGURE 4.2.1.3 - Dataview selection for a query.

For a detailed explanation of this screen, refer to the "Relational Query Language (RQL/32) User Guide" pages 5-9 through 5-10.

4. From the Q3 - Display Request Menu (figure 4.2.1.4) the user selects fields to be displayed. The Field Names are listed alphabetically. The "Display?" column allows the user to select a field for display. The TAB Key will move the cursor to this column. Type a "Y" for the following Field Names: COUNTRY, FIELD-NAME, FIELD-REC-NO, FIPSDOECODE, and STATE-CODE pressing the Tab Key until the "Display?" column is reached. Press SEND to continue to next Menu screen.

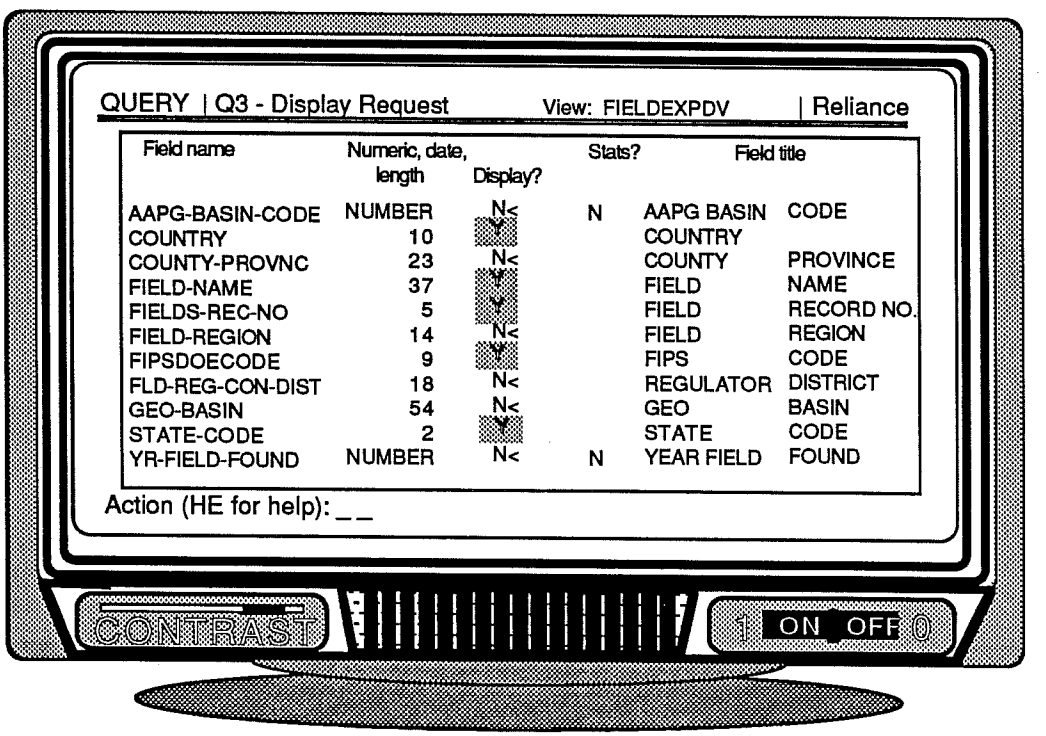


FIGURE 4.2.1.4 - Display request menu for a query.

The F6 Function Key displays a list of the fields selected for the dataview. For a detailed explanation of this screen, refer to the "Relational Query Language (RQL/32) User Guide" pages 4-13 through 5-15.

5. The Q5 - Selection Condition Menu (figure 4.2.1.5) allows the user to specify conditional parameters for the current Query. On this screen, enter "STATE-CODE" (do not enter the quotes) <press TAB Key> "IS" <press TAB Key> "CA". After entering "CA" press SEND to continue to next Menu screen.

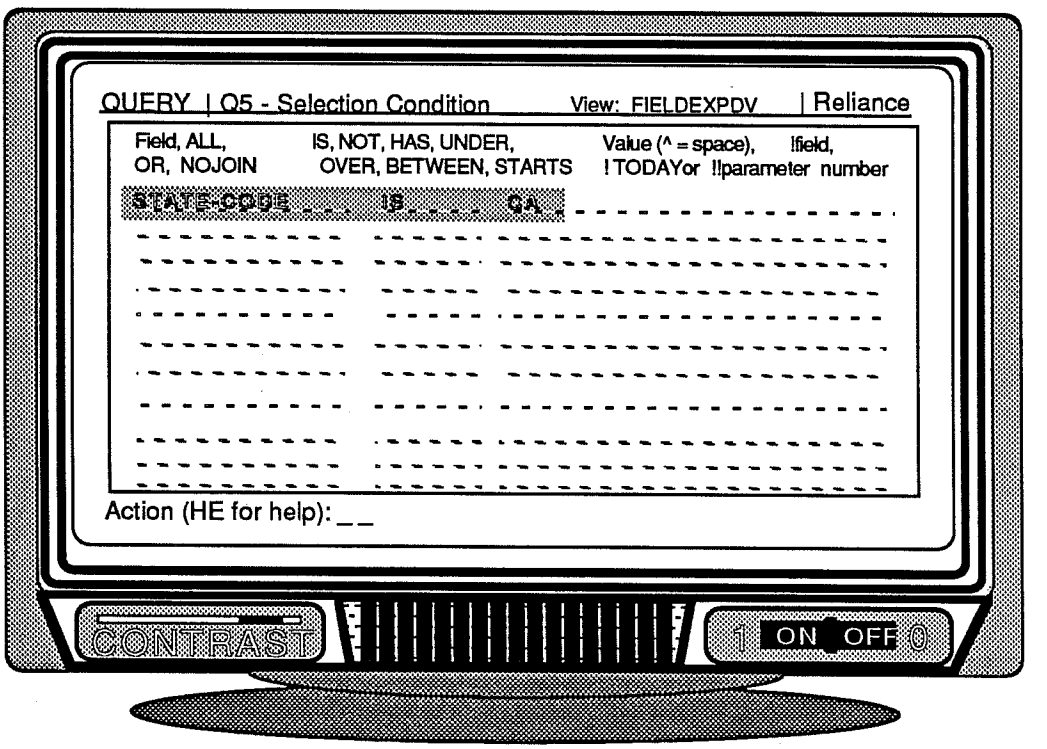


FIGURE 4.2.1.5 - Selection condition menu for a query.

For a detailed explanation of this screen, refer to the "Relational Query Language (RQL/32) User Guide" page 5-20.

6. The Q6 - Output screen (figure 4.2.1.6) displays all the data that satisfies the previously defined conditional parameters as specified on the Q5 - Selection Condition Menu screen. Continue to press SEND to display all the requested data. After the last screen of data is displayed, press SEND to continue to the next Menu screen.

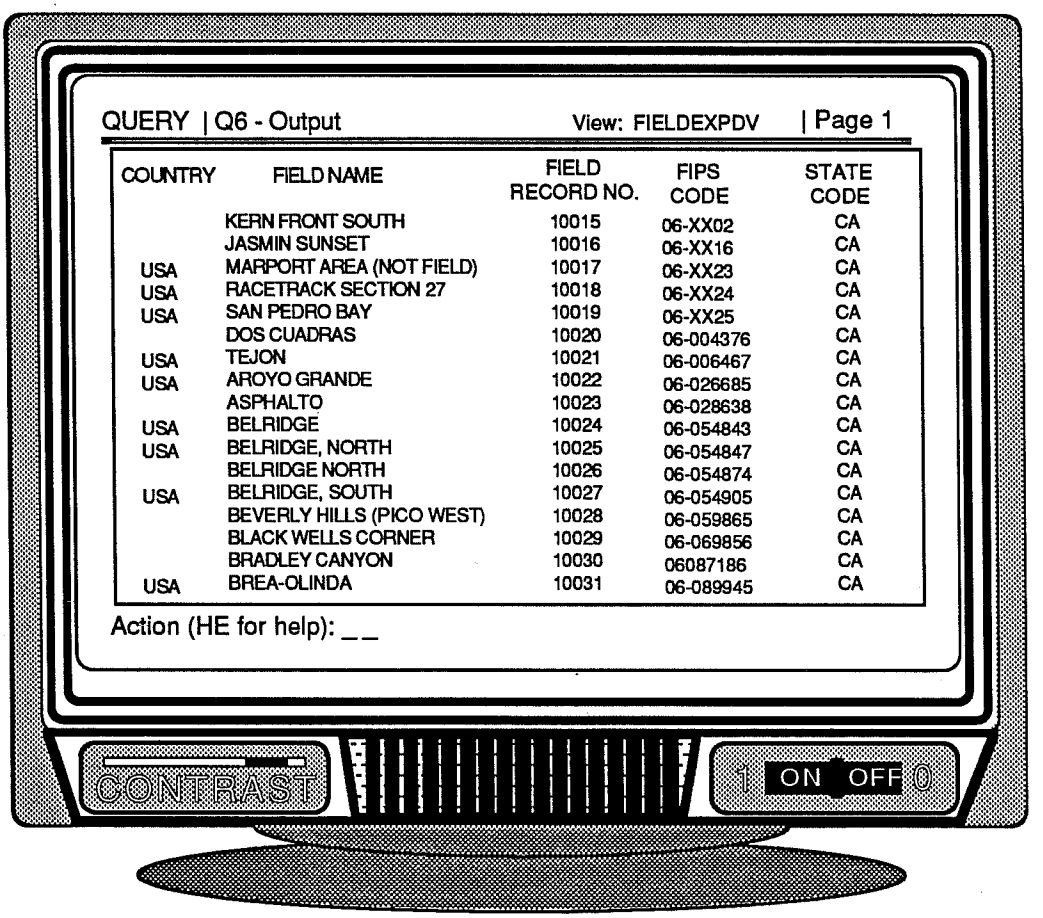


FIGURE 4.2.1.6 - Output screen from example query.

For a detailed explanation of this screen, refer to the "Relational Query Language (RQL/32) User Guide" pages 5-23 through 5-24.

7. The Q7 - Current Query Menu (figure 4.2.1.7) allows the user to save, modify, print, or rerun the current Query. Enter "SAVE" <press TAB Key> enter "FIELDEXPQU" and press SEND to complete the creation of the Query. Press F2 Function Key to return to the System Menu.

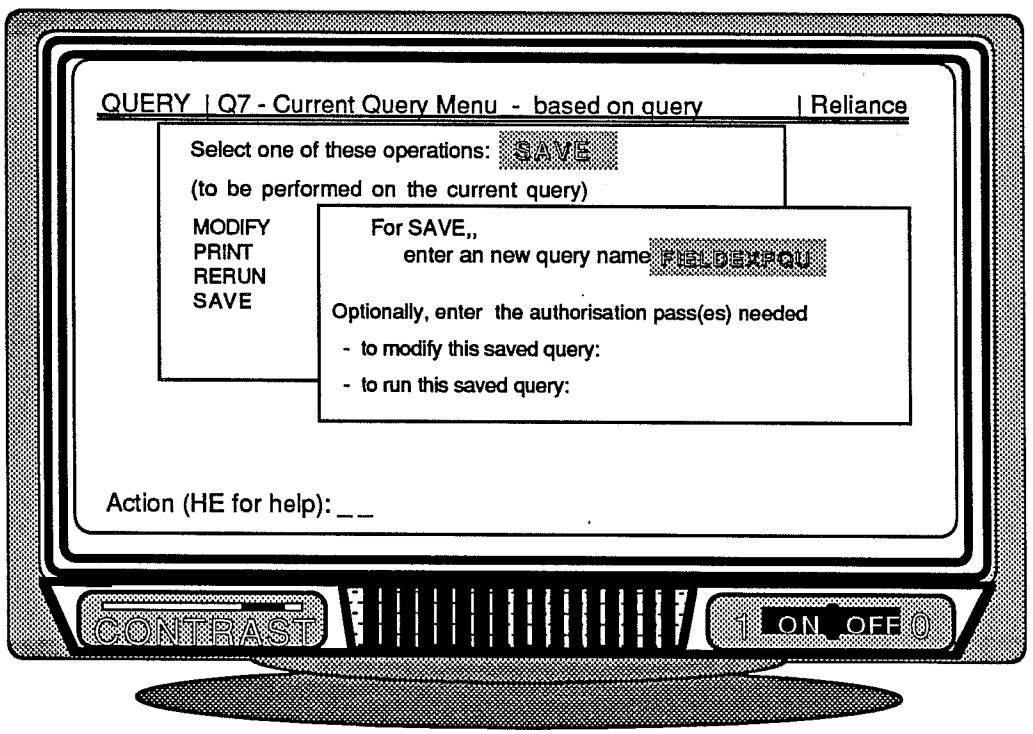


FIGURE 4.2.1.7 - Current QUERY menu for saving the example query.

4.3 RELIANCE Update System (RUS/32)

RUS/32 is an optional component of RELIANCE that allows interactive modifications of data in DMS files. RUS/32 is made up of screen forms and three transaction types. For a detailed explanation, please refer to the manual entitled 'RELIANCE UPDATE SYSTEM (RUS/32)' numbered 48-278 F00 R00, chapters two through four. Appendix 8.5 contains listings of preprogrammed profiles.

PROFILE is a transaction type of the RELIANCE Update System (RUS/32). A RUS profile is an easy, fill-in-the-blanks screen form that is automatically generated at the time the profile is defined. This screen form provides the USER with a controlled and nontechnical method of manipulating data in DMS files. A PROFILE consists of: attributes that contain a number of general properties of the profile such as the associated screen form name, fields selected which may be only a subset of all the fields in the dataview, validation of fields, such as a range of numbers for a numeric field, and selection conditions to determine which records match the conditional parameters supplied by the user.

UPDATE is the transaction type that enables the user to run a RUS profile to create, modify, delete or read records from DMS files.

The LOG transaction may be accessed from UPDATE or PROFILE. The decision to create a log is made in the PROFILE attributes screen. The optional LOG records modifications made to DMS files and may be printed or deleted by a USER with proper authorization.

4.3.1 Creation of an UPDATE PROFILE

1. From the System Menu (figure 4.3.1.1) select by typing in the "PROFILE" transaction and press SEND.

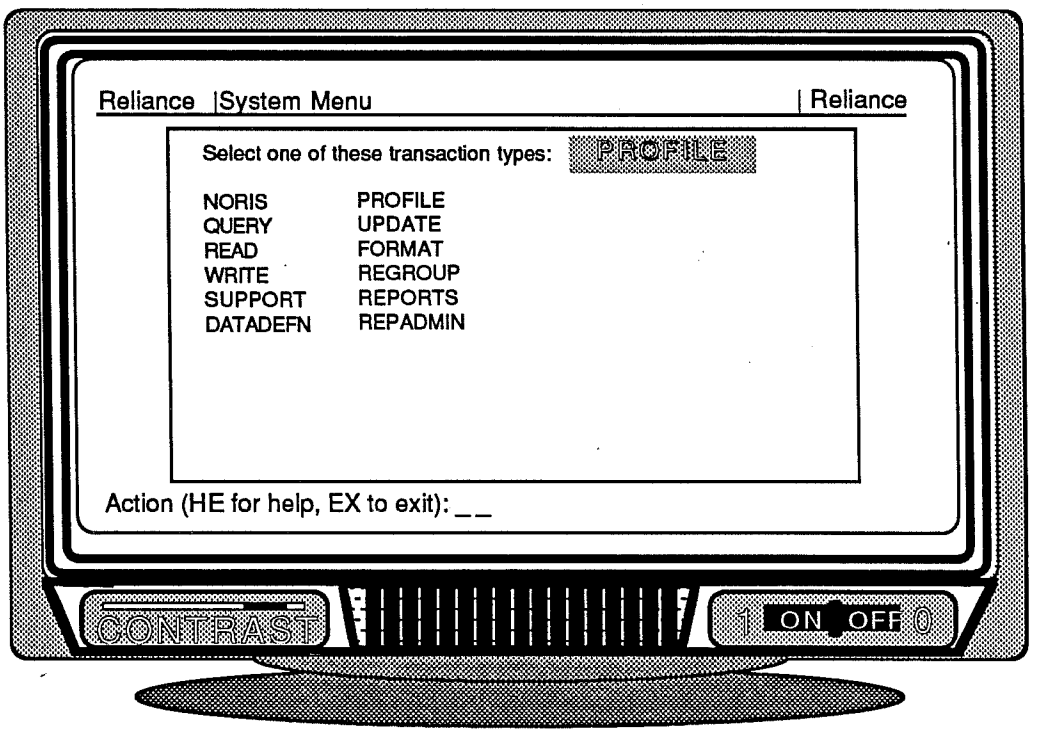


FIGURE 4.3.1.1 - RELIANCE system menu selecting profile transaction.

The F6 function key will list the Profile information screen. For a detailed explanation of this screen refer to the "RELIANCE Update System (RUS/32) User Guide" pages 4-4 through 4-5.

2. The Profile Menu (figure 4.3.1.2) allows for the creation of new profiles. Enter CREATE, press TAB Key, and enter FIELDEXPROF. Press SEND to continue to the next Menu screen.

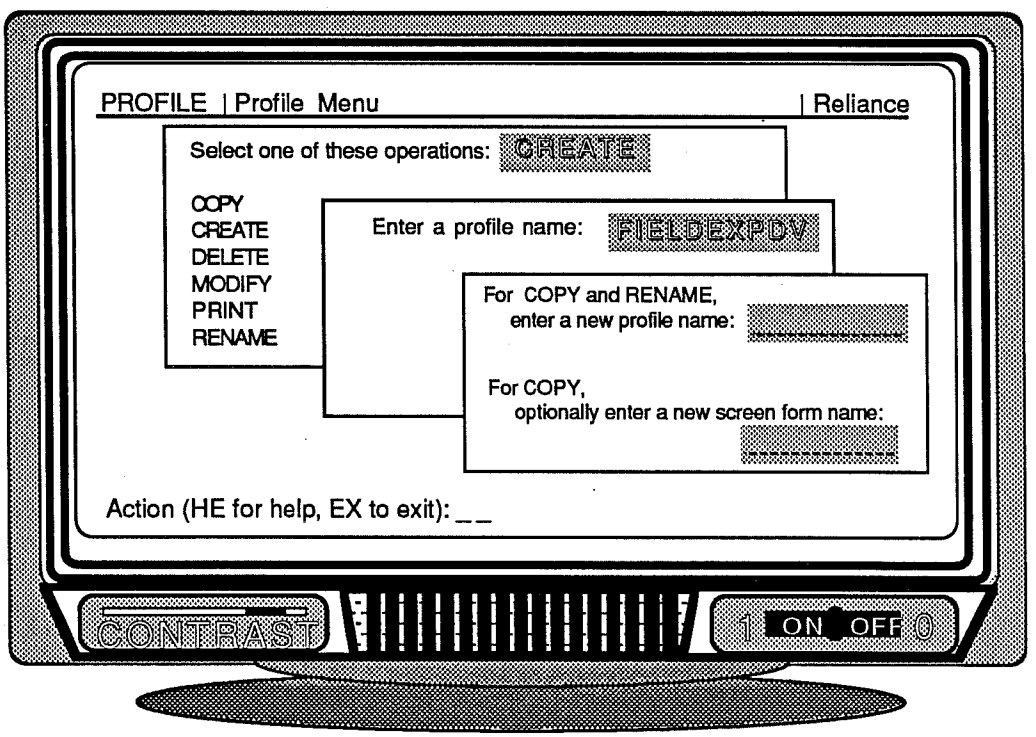


FIGURE 4.3.1.2 - Profile menu screen.

The F6 Function Key lists the Dataview Information. The F3 Function Key completes the transaction with an incomplete Profile. Refer to the "RELIANCE Update System (RUS/32) User Guide" pages 4-6 through 4-8.

3. The Attributes of Profile FIELDEXPROF Menu (figure 4.3.1.3) allows the user to specify properties of the new profile. Enter "Example of Profile based on the FIELDS DMS." (don't enter any quotes), press TAB Key, enter "FLDEXP", press TAB Key, enter "FIELDEXPDV", press TAB Key three times, enter "N", cursor will move to next field without Tab, enter "N", cursor will move to next field without Tab, enter "N", cursor again will move to next field without Tab, enter "Y", cursor moves again without Tab, enter "N" and press SEND to go to the next Menu screen.

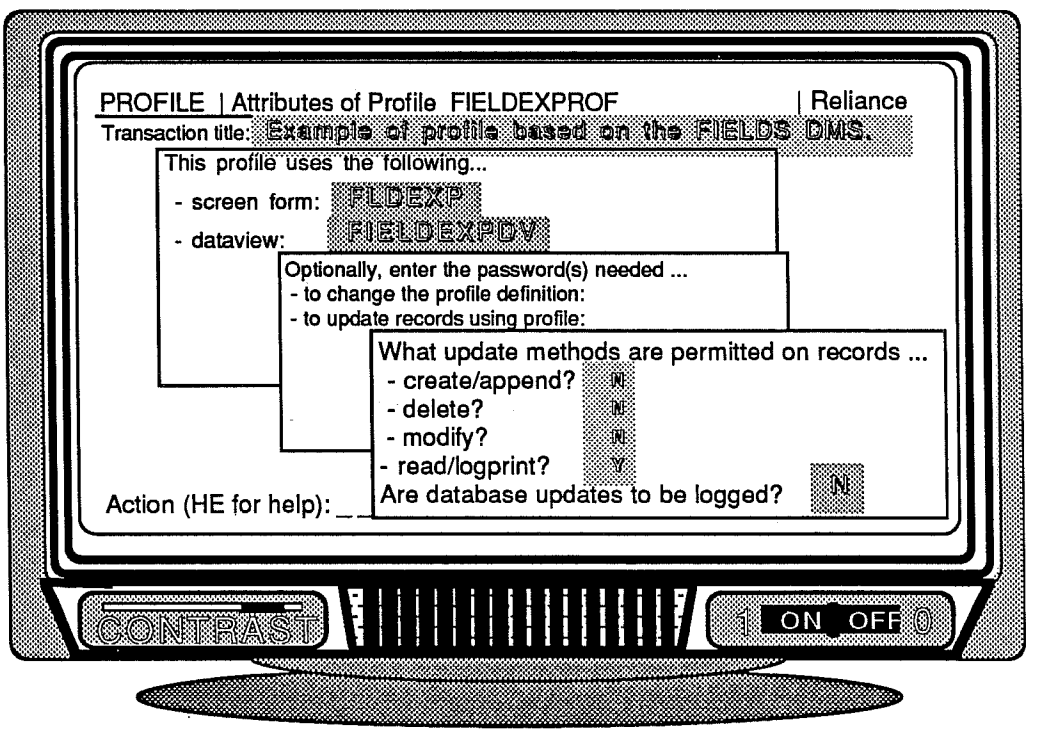


FIGURE 4.3.1.3 - Profile attributes screen.

The F7 Function Key will go to the Selection/Validation Screen. The F3 Function Key completes the transaction with an incomplete Profile. Refer to the "RELIANCE Update System (RUS/32) User Guide" pages 4-9 through 4-12.

4. The Field Selection Menu (figure 4.3.1.4) allows the user to select from previously specified dataview fields to be displayed for this profile. In the column titled "Display?" enter "Y", press TAB until the "Display?" column is reached for the next Field Name, enter another "Y" and press TAB as previously described until all Field Names have been selected. Press SEND to continue to the next Menu screen.

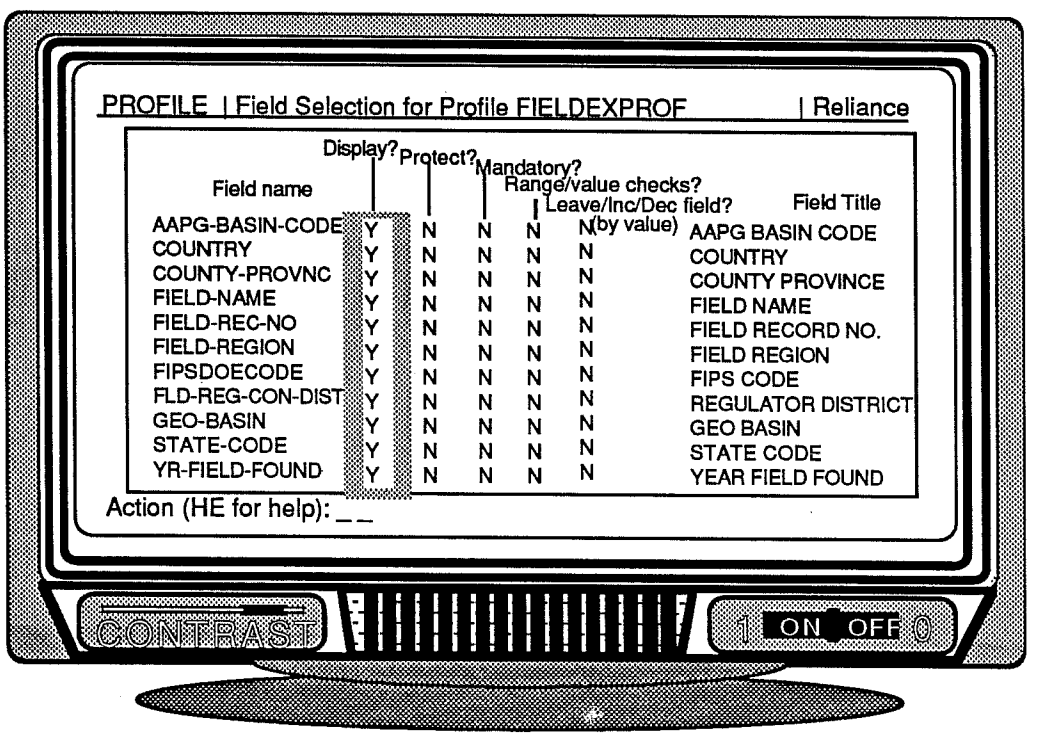


FIGURE 4.3.1.4 - PROFILE field selection menu.

The F6 Function Key will list the Field Information screen. The F3 Function Key will complete the transaction and return to the Profile Menu. For a detailed explanation of this screen refer to the "RELIANCE Update System (RUS/32) User Guide" pages 4-6 through 4-8.

5. From the Select and Validate Conditions Menu screen (figure 4.3.1.5) the user specifies conditional parameters applicable to the profile. Enter "STATE-CODE", press TAB, enter "IS", press TAB Key, enter "CA". Press SEND to go to the next Menu screen.

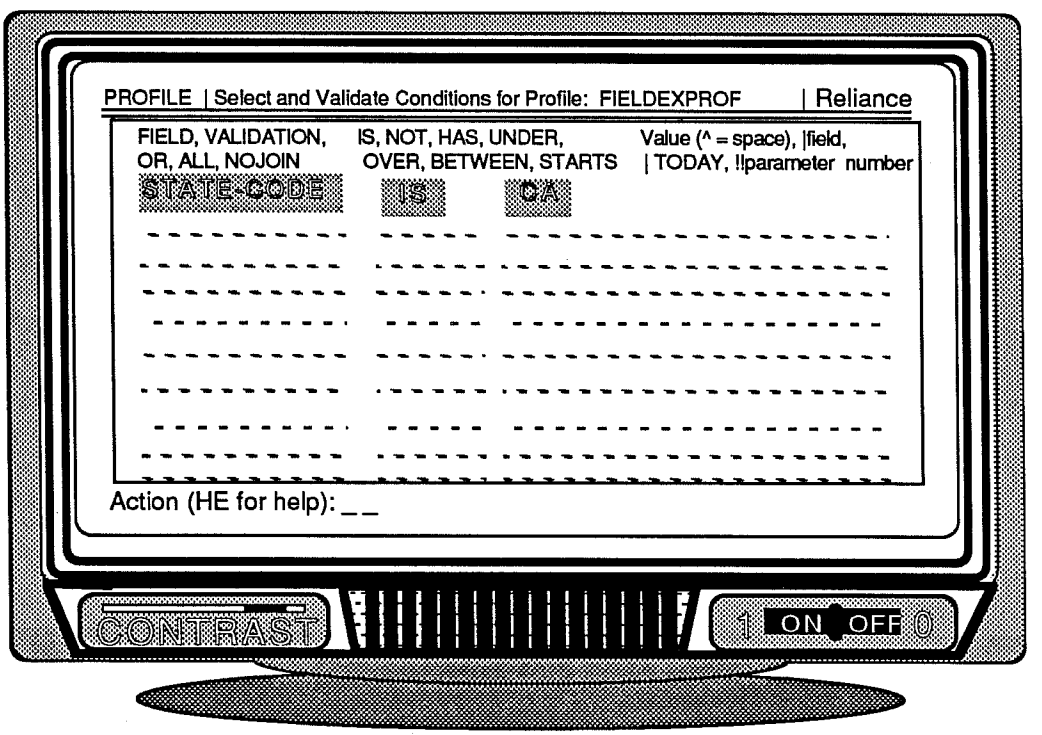


FIGURE 4.3.1.5 - Profile selection and validation conditions menu.

6. This example of the Profile screen (figure 4.3.1.6) allows the user to view the display screen automatically created by RUS/32 for this profile. If the user desires, the screen may be modified by the SUPPORT transaction available from the System Menu. Press SEND to complete the creation of profile FIELDEXPROF. The next Menu that is displayed is the Profile Menu. To return to the System Menu, press the F2 Function Key.

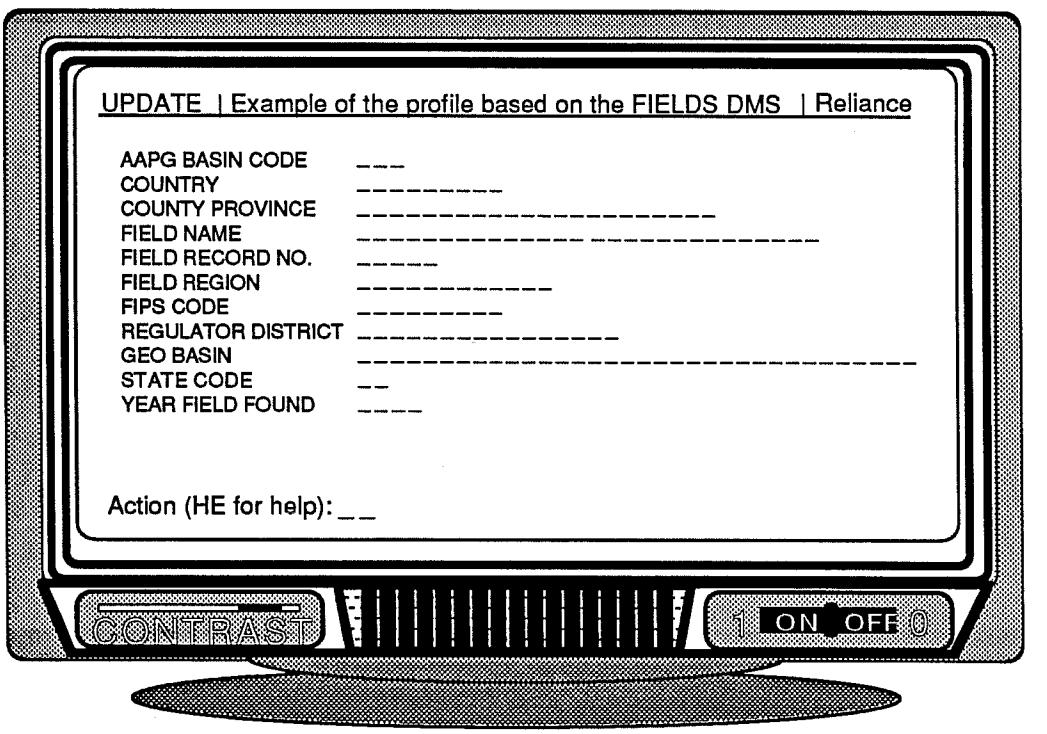


FIGURE 4.3.1.6 - UPDATE screen for example profile.

4.3.2 Use of the UPDATE Transaction

1. From the System Menu, select by typing in the "UPDATE" transaction and press SEND (figure 4.3.1.7).

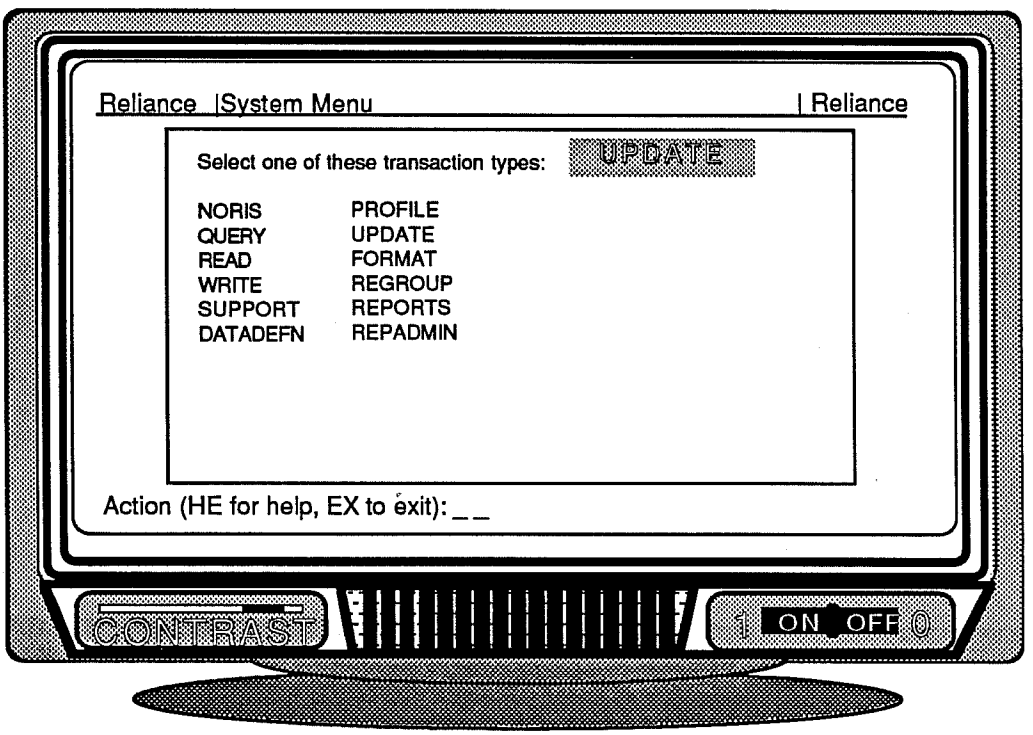


FIGURE 4.3.1.7 - RELIANCE system menu screen.

The F6 Function Key is also available for listing all the current Profiles and the type of updates allowable for each Profile. After viewing the information displayed, press SEND to return to the previous menu. If there are many Profiles, another screen is displayed with similar information concerning the other Profiles. Continue to press SEND until the File Update Menu screen is displayed. The F4 Function Key will cancel the transaction. For a detailed explanation of this screen, refer to the "RELIANCE Update System (RUS/32) User Guide" pages 4-25 through 4-26. Press SEND to continue to the next Menu screen.

2. On the File Update Menu (figure 4.3.1.8) enter "FIELDEXPROF", press TAB Key, and enter READ. Press RETURN to go to the next Menu screen.

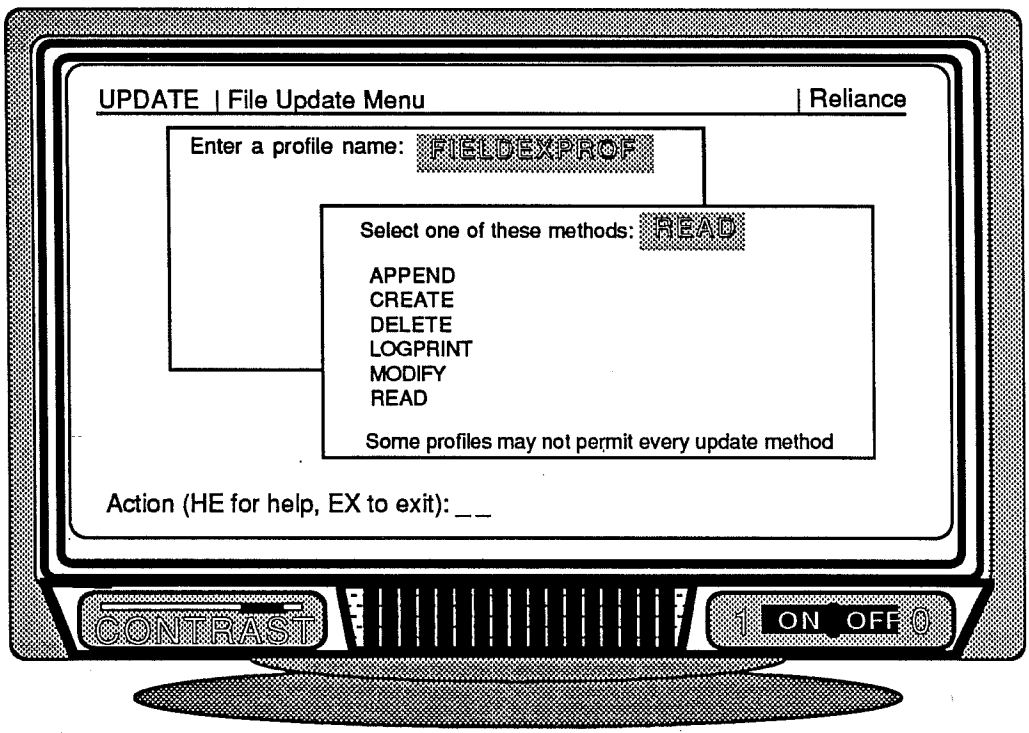


FIGURE 4.3.1.8 - UPDATE menu screen.

3. The last screen to be displayed for this transaction contains the data that satisfies the conditional parameters for the Profile FIELDEXPROF (STATE-CODE IS CA). Press SEND to view more information or press the F3 Function Key to complete the transaction and return to the File Update Menu (figure 4.3.1.9). To return to the System Menu, press the F2 Function Key.

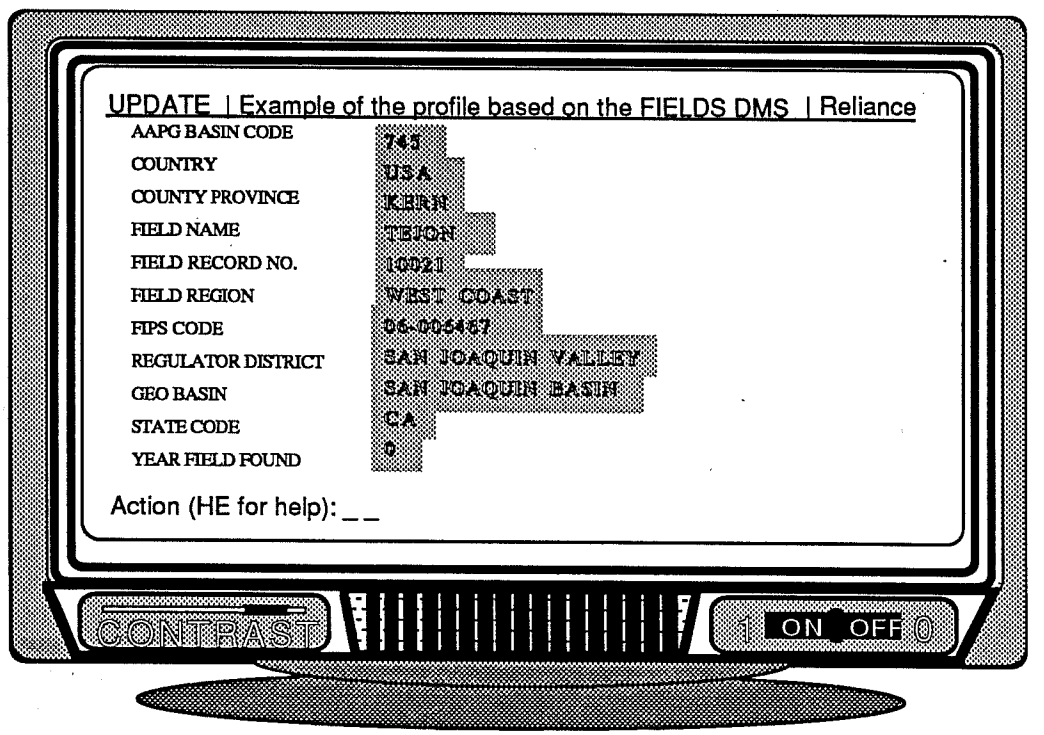


FIGURE 4.3.1.9 - Update screen for example.

4.4 REPORTER/32

Reporter/32 is the non-procedural report generator for use with RELIANCE under ITC. Reporter/32 has the following features: reports up to 240 columns (bytes) wide that can be sent to an OS/32 indexed file; use of saved RQL/32 queries; data fields which may be numbers, dates or strings that may be edited or justified; complete control of report design including spacing and page breaks; summary reports; and optional passwords to control access by users to run or modify reports. All available actions and associated function keys are displayed in Table 4.4.1, page 4 - 9. There are four transactions that comprise Reporter/32. These are: 1. FORMAT, 2. REPGROUP, 3. REPORTS, 4. REPADMIN.

4.4.1 FORMAT

Section 4.4.5 contains step-by-step instructions on the FORMAT transaction. The FORMAT transaction allows the user to define the design of the report by the use of four screens. The Report Attributes screen specifies the dataview or query to be used, optional password, zone character, and page width and height. For examples refer to "Using Reporter/32, Part I User Guide," pages 3-4 through 3-5. For detailed information refer to the same manual "Part II Reference Section," pages 10-15 through 10-16.

The Report Layout screen is a blank screen (much like the SUPPORT transaction for the creation of a new screen form). This is the screen on which the user designs the report. On the Layout screen, the user must decide what type of element each line of the report is and so designate this in the Elem column. For examples, refer to "Using Reporter/32, Part I User Guide," pages 2-5 through 2-6, 3-6 through 3-7, 4-1 through 4-2, 4-4 through 4-5, and

appendix A1. For detailed information, refer to the same manual "Part II Reference Section," pages 10-17 through 10-19.

The Element Usage screen defines how elements created on the Report Layout screen(s) are used. For examples, refer to "Using Reporter/32, Part I User Guide," pages 2-7 through 2-8, 3-9 through 3-9, and appendix A1. For detailed information refer to the same manual "Part II Reference Section," pages 10-20 through 10-23.

The Field Details screen is the last screen of the FORMAT transaction. This screen allows the user to define how data is displayed and if any calculations are used on the data. For examples, refer to "Using Reporter/32, Part I User Guide," pages 2-8, 3-10 through 3-11, and 4-1 through 6-12. For detailed information refer to the same manual "Part II Reference Section," pages 10-24 through 10-25.

4.4.2 REPGROUP

Section 4.4.6 contains a step-by-step guide of the REPGROUP transaction. After a report has been implemented, it must be included in a report group prior to running. The report group defines the physical aspects for running the report such as an optional password, identifying the printer, and designating the query or view to be used with the report group. The Report Group Attribute screen allows the user to give a brief description of the report and optional passwords to change or run. For an example, refer to "Using Reporter/32, Part I User Guide," page 7-2. For detailed information refer to the same manual "Part II Reference Section" page 10-31.

The Report Group Specification screen defines the source of input data for the report group and reports to be used (ten reports may be specified for one Report Group). For examples, refer to "Using Reporter/32, Part I User Guide"

pages 7-3 through 7-5. For detailed information, refer to the same manual "Part II Reference Section: pages 10-32 through 10-33.

4.4.3 REPORTS

Refer to section 4.4.7 of this manual for a step-by-step example of the REPORTS transaction. After the Report Group has been implemented, the group can then be run from the REPORTS transaction. The Report Production Menu allows the user to run a specific report group. For detailed information, refer to "Using Reporter/32, Part II Reference Section," pages 10-36 through 10-37. Status of the report group may also be determined from this screen. If the user selects STATUS and enters the currently submitted report group the Report Group Status screen is displayed. This screen gives the user information on the date and time the report began executing, the data transfer file used, the date and time status last updated, the report name, the current phase of report generation, and an informative status message. For detailed information, refer to "Using Reporter/32, Part II Reference Section," page 10-38.

4.4.4 REPADMIN

Refer to page 4 - 48 (figure 4.4.25) for an example of the REPADMIN transaction. The Report Administration Menu allows the user to export or import a report or a report group. This Menu also allows access to the FORMAT, REPGROUP, and REPORTS transactions without going back to the System Menu. For an example, refer to "Using Reporter/32, Part I User Guide," pages 9-1 through 9-3. For detailed information, refer to the same manual "Part II Reference Section," pages 10-41 through 10-45.

TABLE 4.4.1 - Actions and Function keys applicable to Reporter/32

Function Key	Action	Meaning
F1	QU	QUIT, return to system menu.
F2	EX	EXIT, return to prior menu.
F3	EN	END, complete transaction and display previous menu.
F4	CA	CANCEL, abandon transaction and display previous menu.
F5	HE	HELP, screen.
F6	IN	INFO screen.
F7	OK	OK, to move to next stage or return from INFO screen.
F8	OP	OPEN, open a gap in report.
F9	BA	BACK, return to previous screen.
F10	DE	DELETE, delete unlabelled elements.
F11		reserved.
F12	HO	HOME, move to window Down1 Across1.
F13	UP	UP, move to window above.
F14	DO	DOWN, move to window below.
F15	LE	LEFT, move to window on left.
F16	RI	RIGHT, move to window on right.

4.4.5 Creating the format for a Reporter/32 output.

The format transaction will allow the user to design the output for the report.

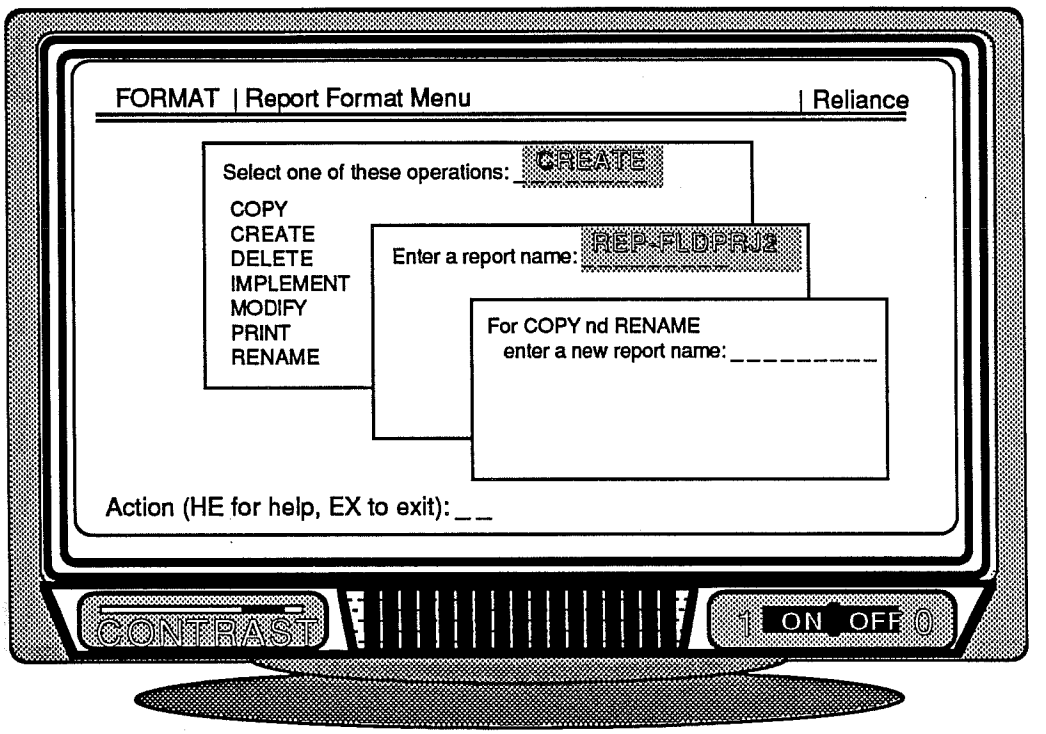


FIGURE 4.4.5.1 - Report Format Menu Screen.

1. At the System Menu, enter FORMAT. Press SEND.

2. The Report Format Menu is displayed. The F5 Function Key displays the Help screen. The F6 Function Key lists information on all reports and the associated dataview, profile, or query. Enter CREATE, press TAB, enter REP-FLDPRJ2. Press SEND.

   For complete information on the Report Format Menu, refer to "Using Reporter/32, Part II Reference Section," pages 10-13 through 10-14.

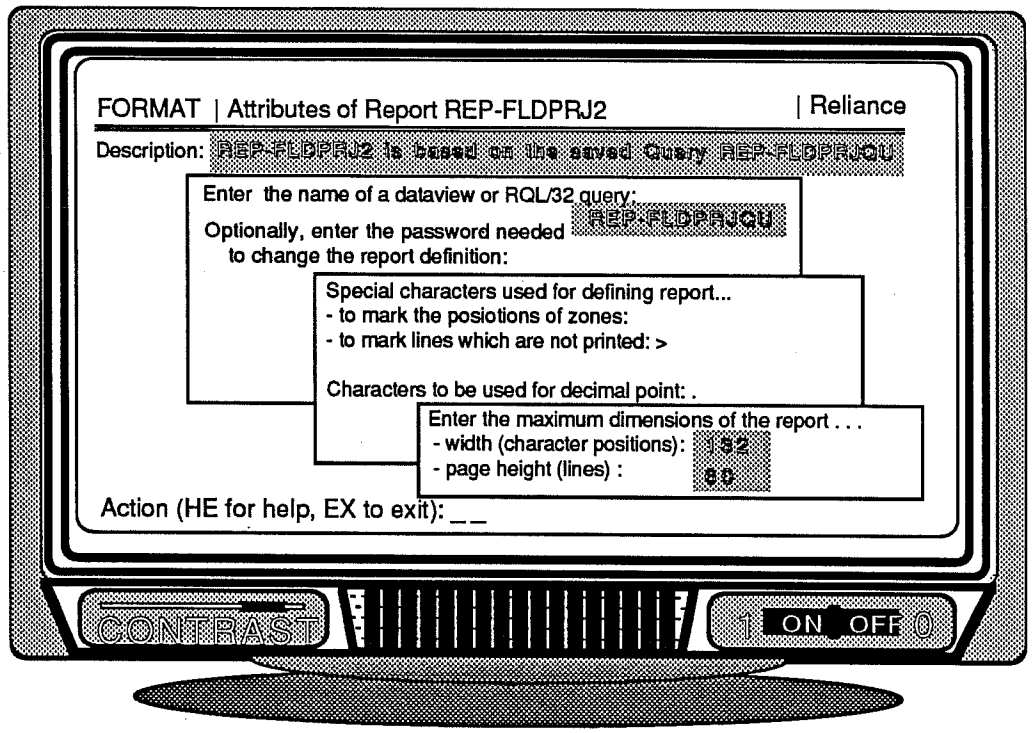


FIGURE 4.4.5.2 - Report Attributes Screen.

3. The Report Attribute Screen is displayed. The F5 Function Key displays the Help screen. The F6 Function Key lists information on dataviews, profiles, and queries. Enter, "The following information is for REP-FLDPRJ2." (don't type quotes), press TAB, enter REP-FLDPRJQU, press SEND.

   For complete information on the Report Attribute Screen, refer to "Using Reporter/32, Part II Reference Section," pages 10-15 through 10-16.

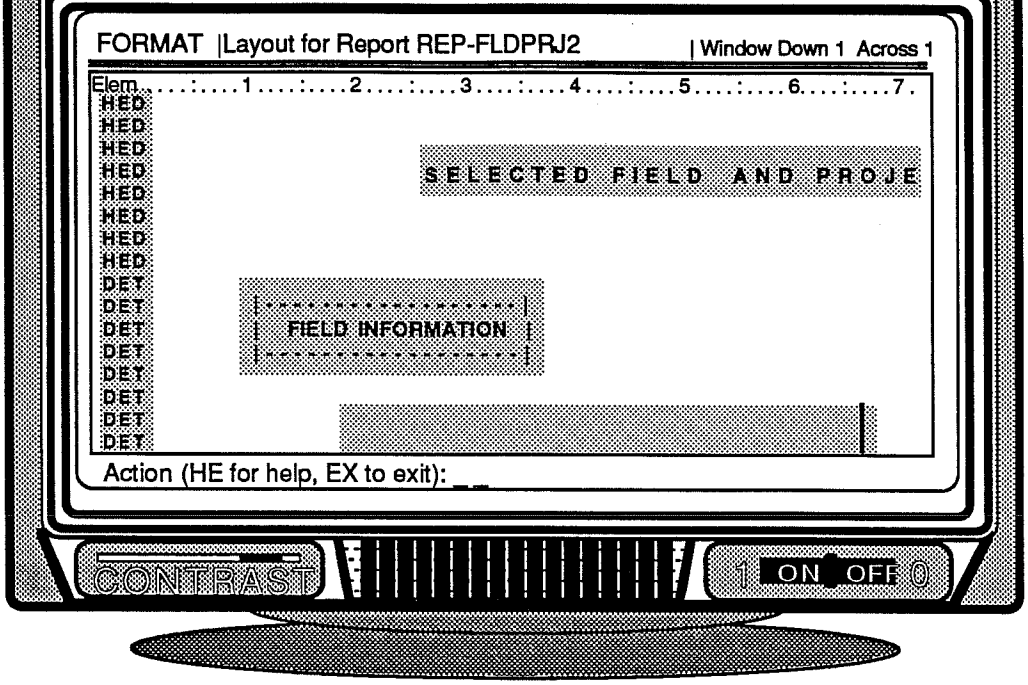


FIGURE 4.4.5.3 - Report Layout Screen.

4. The Report Layout Screen is displayed. This screen allows the user to create a unique design for the report. Any printable character is allowable. The column titled Elem must have a user created element name. Please refer to table 4.4.1 for a complete list of all valid function keys and actions. The figures 4.4.5.3 through 4.4.5.9 are all the layout screens for this report. When the user moves vertically (DOWN) through different layout screens, the last two lines of one screen are displayed at the top of the next screen.

   Complete the screen design exactly as displayed in figure 4.4.5.3. The TAB key will only tab to the Elem column. Use the arrow keys to position the cursor on the screen for all other non-protected areas. Press the F16 Function Key to move right.

   For complete information on the Report Layout Screen, refer to "Using Reporter/32, Part II Reference Section," pages 10-17 through 10-19.

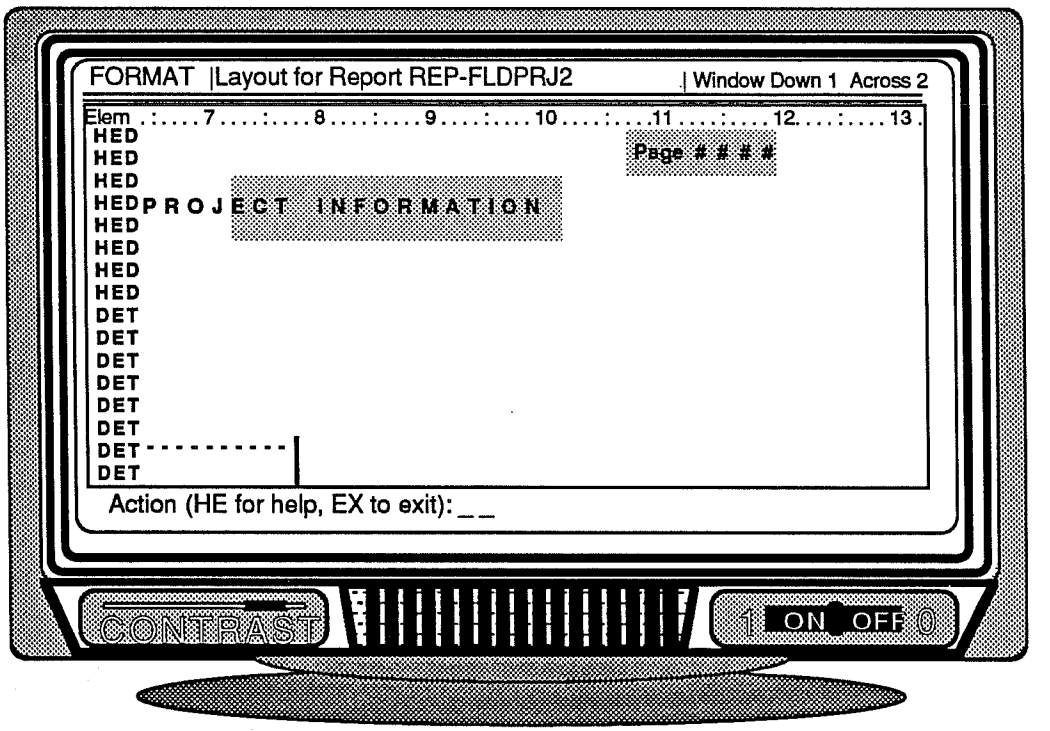


FIGURE 4.4.5.4 Report Layout Screen.

Complete the screen design exactly as displayed in figure 4.4.5.4. Use the arrow keys to position the cursor on the screen. After the screen is complete, press the F15 Function Key to move left. Press the F14 Function Key to move down to a new layout screen.

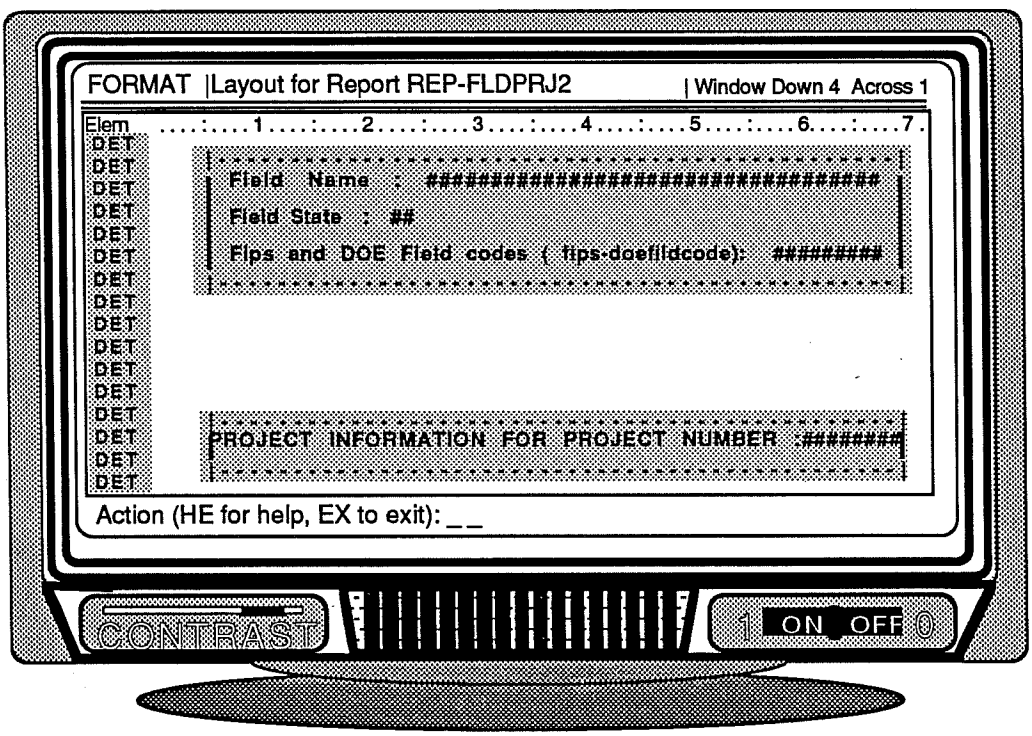


FIGURE 4.4.5.5 - Report Layout Screen.

Complete the screen design exactly as displayed in figure 4.4.5.5. The TAB key will only tab to the Elem column. Use the arrow keys to position the cursor on the screen. When complete, press the F14 Function Key to move down to a new layout screen.

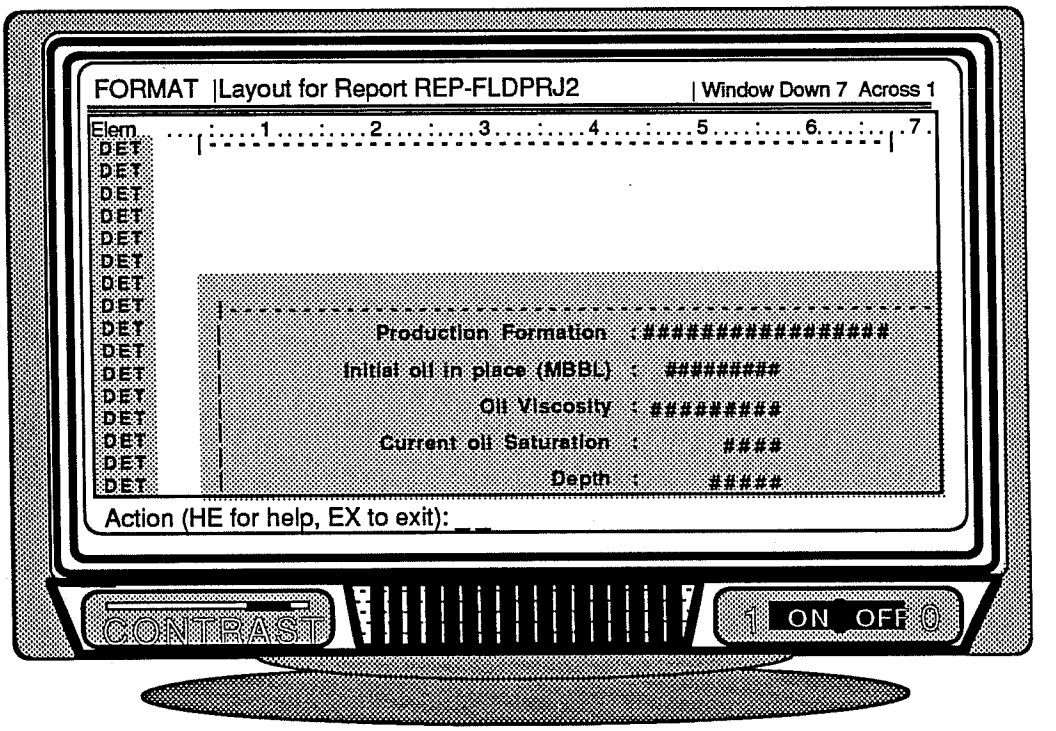


FIGURE 4.4.5.6 - Report Layout Screen.

Complete the screen design exactly as displayed in figure 4.4.5.6. The TAB key will only tab to the Elem column. Use the arrow keys to position the cursor on the screen. When complete, press the F16 Function Key to move right.

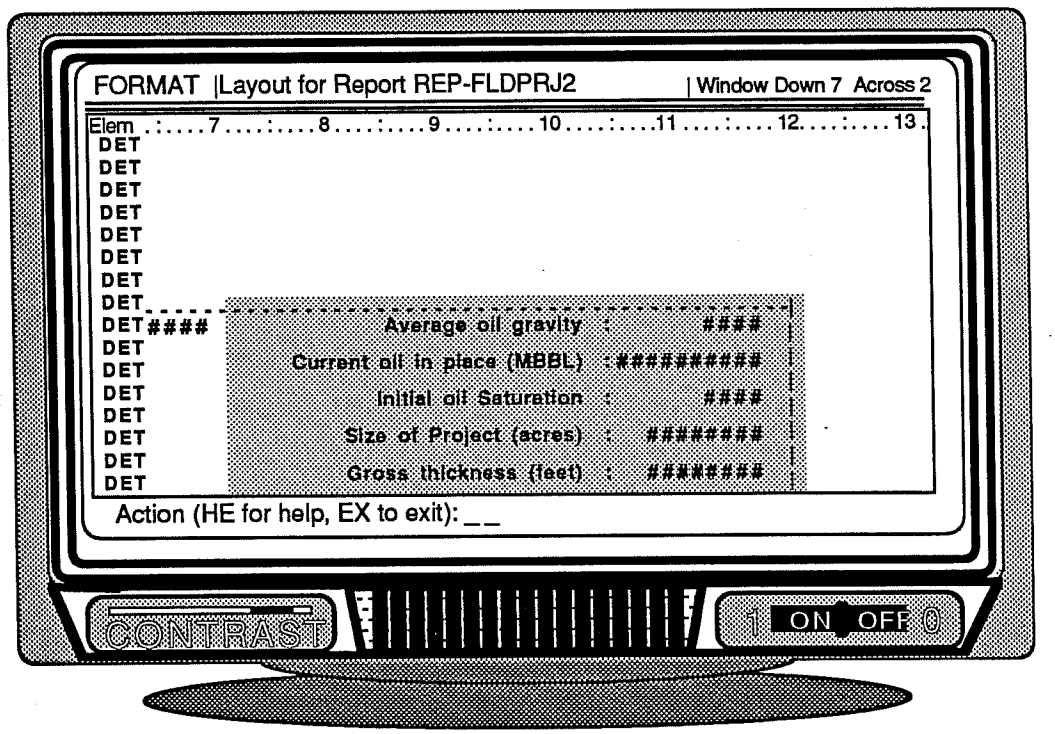


FIGURE 4.4.5.7 - Report Layout Screen.

Complete the screen design exactly as displayed in figure 4.4.5.7. Use the arrow keys to position the cursor on the screen. When complete, press the F15 Function Key to move left. Press the F14 Function Key to move down to a new layout screen.

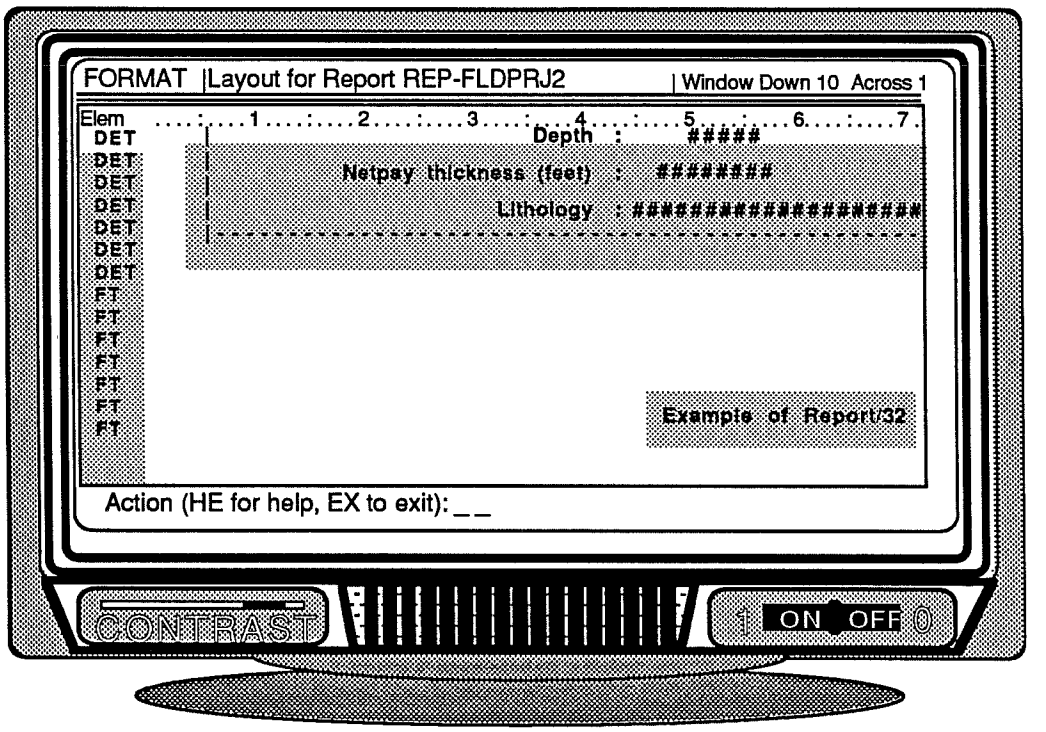


FIGURE 4.4.5.8 - Report Layout Screen

Complete the screen design exactly as displayed in figure 4.4.5.8. The TAB key will only tab to the Elem column. Use the arrow keys to position the cursor on the screen. When complete, press the F16 Function Key to move right.

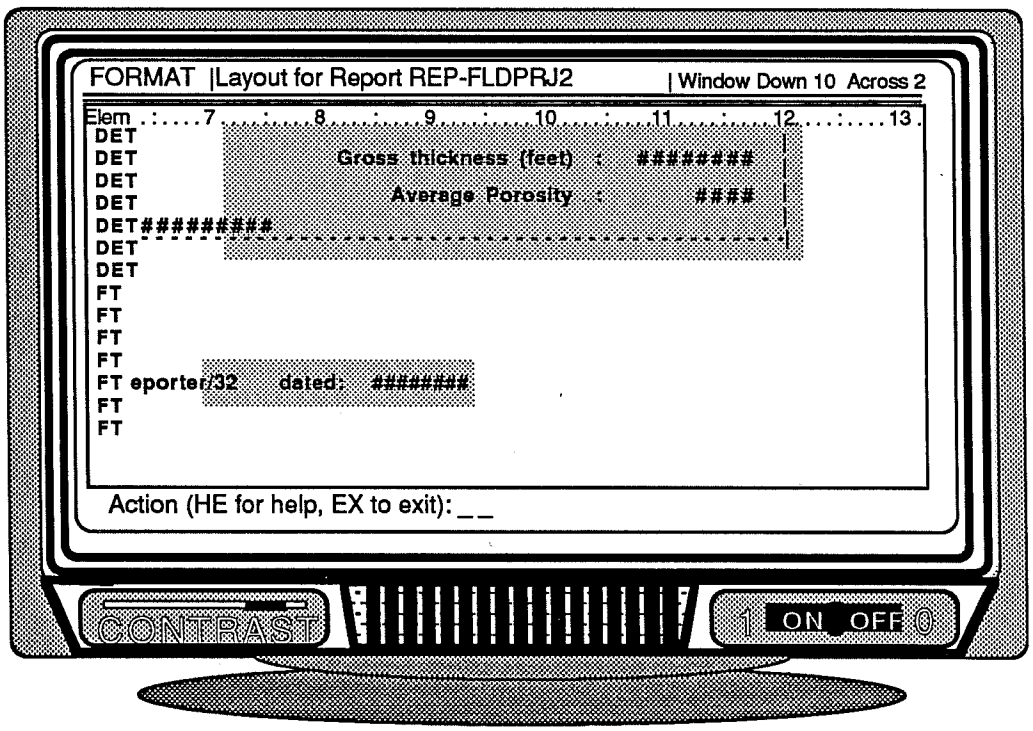


FIGURE 4.4.5.9 - Report Layout Screen.

Complete the screen design exactly as displayed in figure 4.4.5.9. Use the arrow keys to position the cursor on the screen. When complete, press SEND.

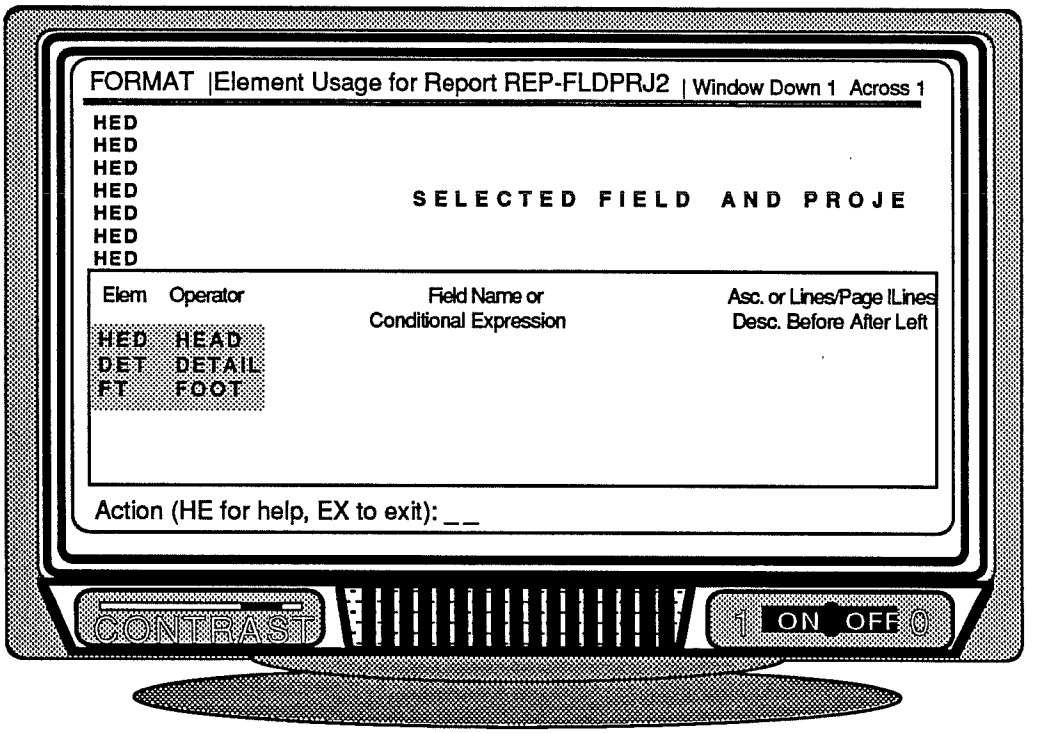


FIGURE 4.4.5.10 - Element Usage Screen.

5. The Element Usage Screen is displayed. This screen will define the usage of the elements on the Report Layout screens. Enter information exactly as figure 4.4.5.10. Press SEND when completed.

   For complete information on the Element Usage screen, refer to "Using Reporter/32, Part II Reference Section," pages 10-20 through 10-23.

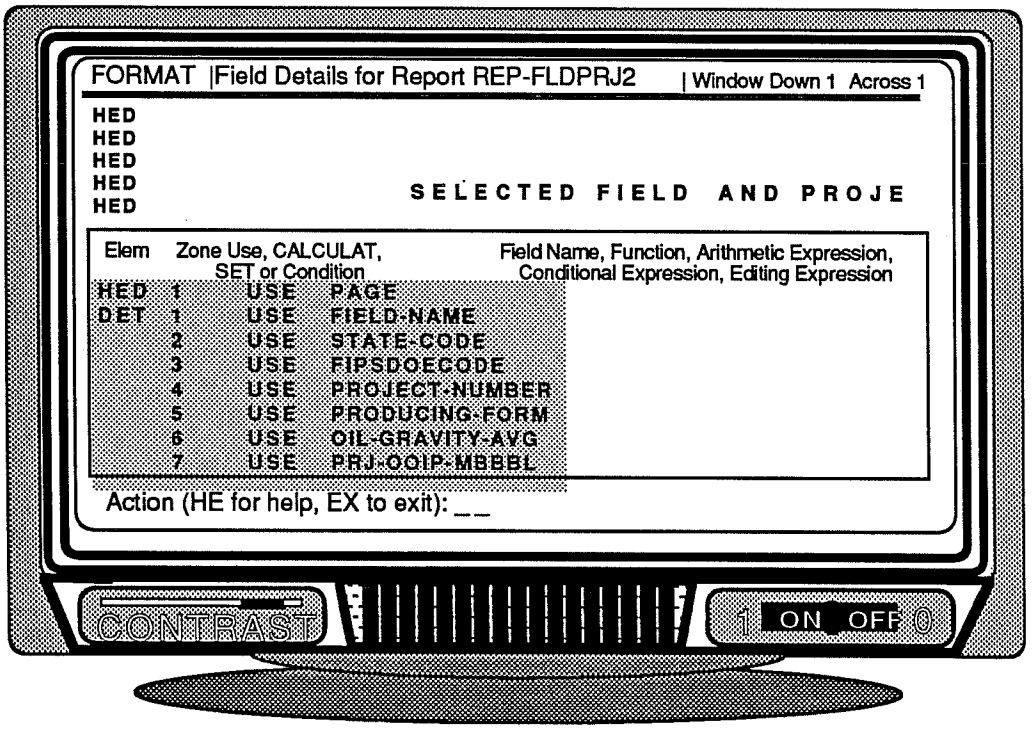


FIGURE 4.4.5.11 - Field Details Screen.

6. The Field Details Screen is then displayed. This screen allows the user to specify how the data is to be displayed and if any calculations are used. Complete figures 4.4.5.11 through 4.4.5.13 exactly as shown. At the last screen, press SEND.

   For complete information on the Field Details screen, refer to "Using Reporter/32, Part II Reference Section," pages 10-24 through 10-26.

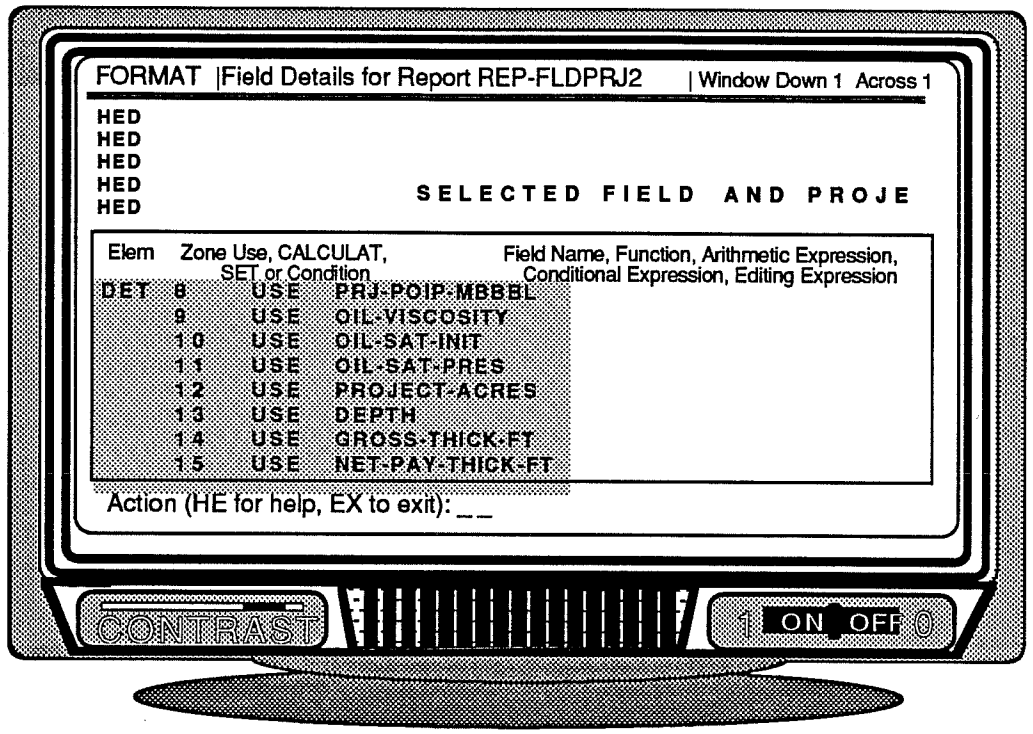


FIGURE 4.4.5.12 - Field Details Screen.

Complete screen and press SEND to continue to next screen.

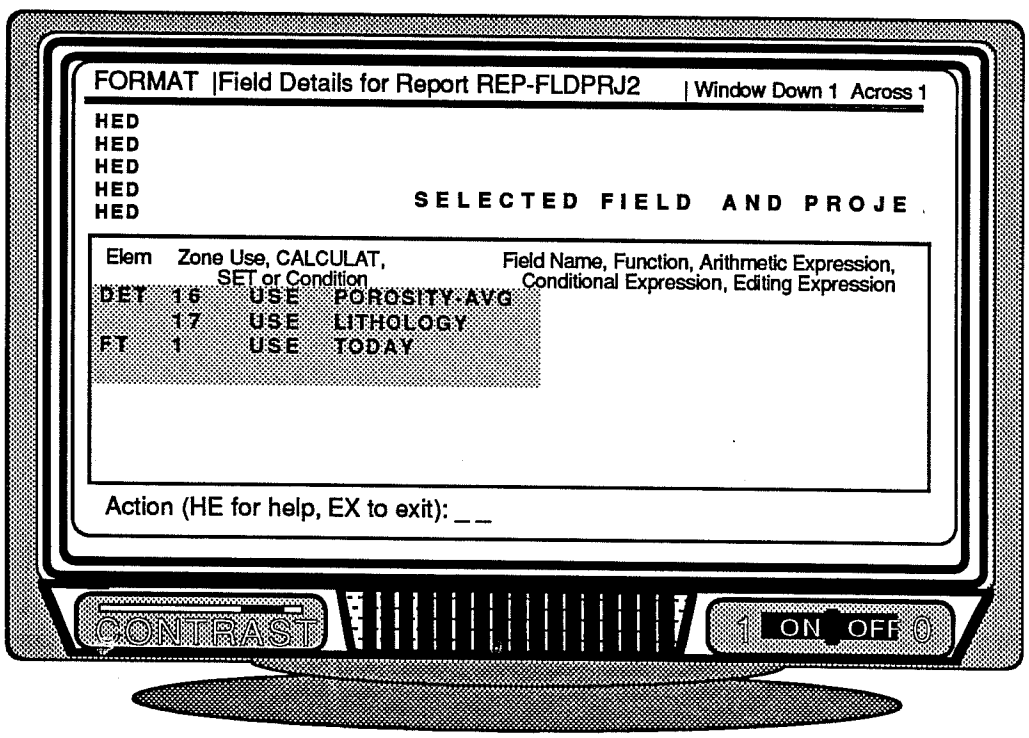


FIGURE 4.4.5.13 - Field Details Screen.

Complete screen and press SEND to continue.

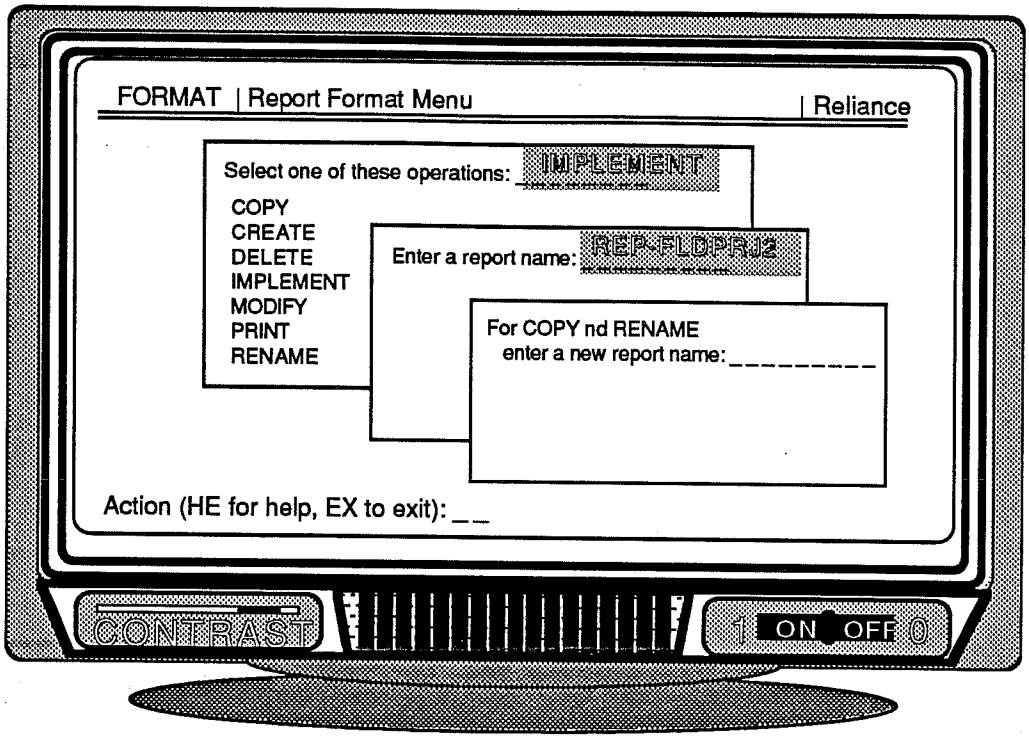


FIGURE 4.4.5.14 - Report Format Menu.

7. The Report Format Menu is redisplayed. Enter IMPLEMENT, press TAB, enter REP-FLDPRJ2 and press SEND. Press the F2 Function Key to return to the System Menu.

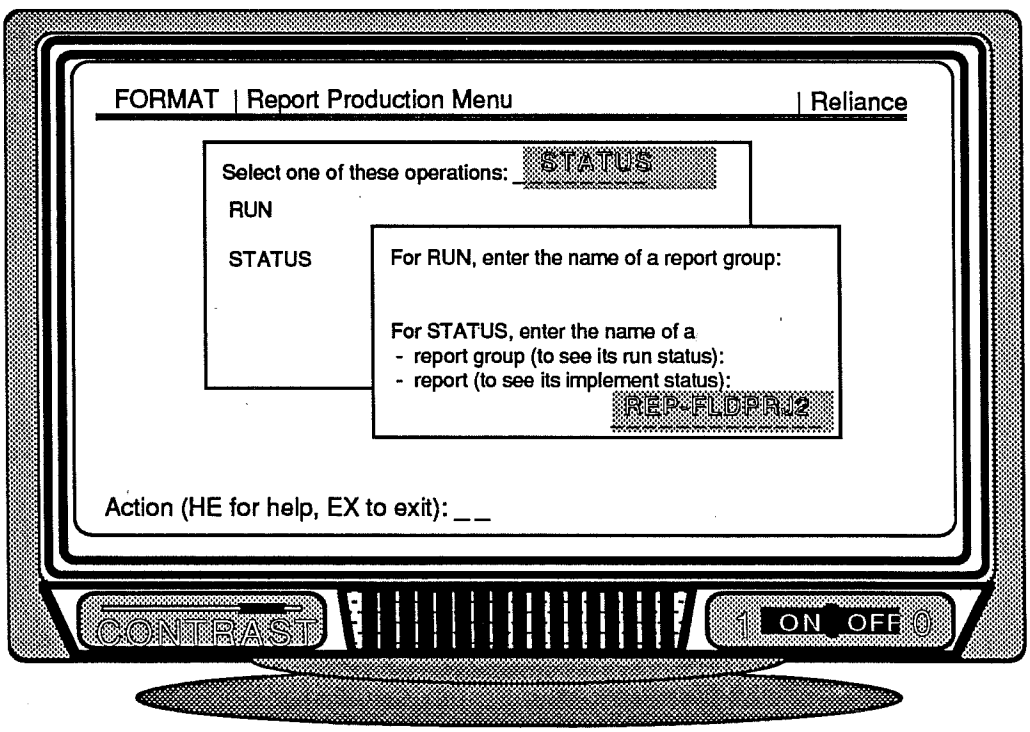


FIGURE 4.4.5.15 - Report Production Menu.

8. At the System Menu, enter REPORT and press SEND.

9. The Report Production Menu is displayed. Enter STATUS, press TAB, and enter REP-FLDPRJ2. Press SEND.

   For complete information on the Report Production Menu, refer to "Using Reporter/32, Part II Reference Section," pages 10-36 through 10-37.

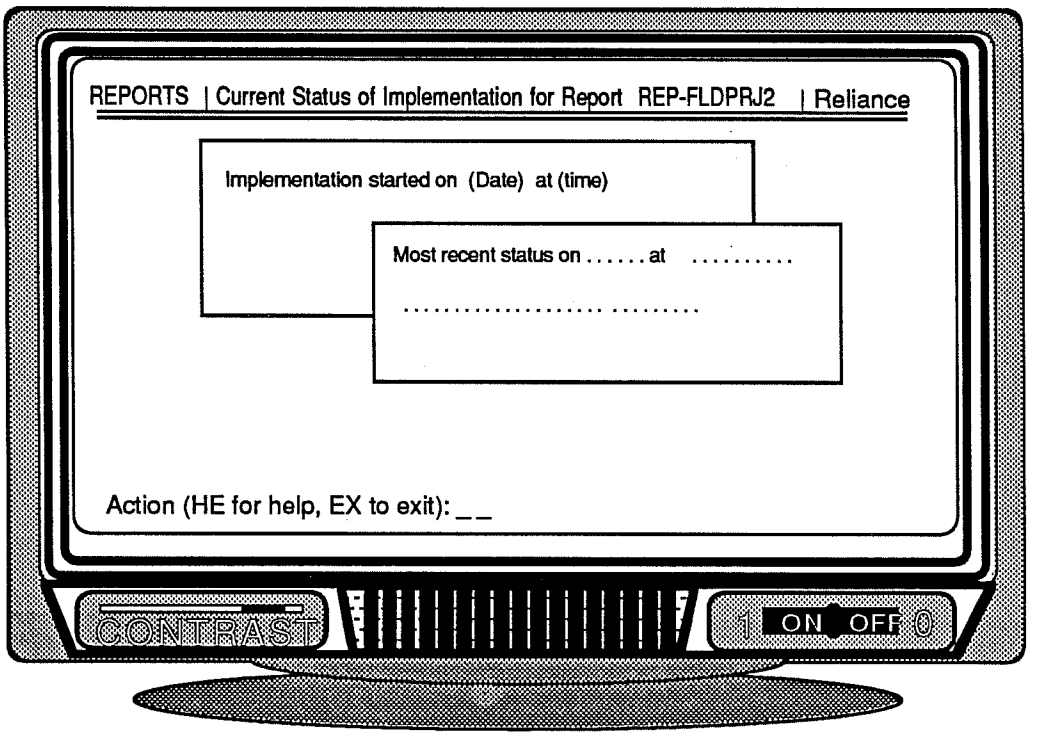


FIGURE 4.4.5.16 - Report Status Screen.

10. The Report Status Screen is displayed. This screen informs the user of the status of the implementation process for the report. Press SEND to continue to check the status until the report is implemented. After implementation, press the F1 Function Key to return to the System Menu.

    For complete information on the Report Status screen, refer to "Using Reporter/32, Part II Reference Section," page 10-39.

4.4.6 Creation of the Report Group for Reporter/32.

The Report Group will allow various physical parameters to be established for up to ten reports.

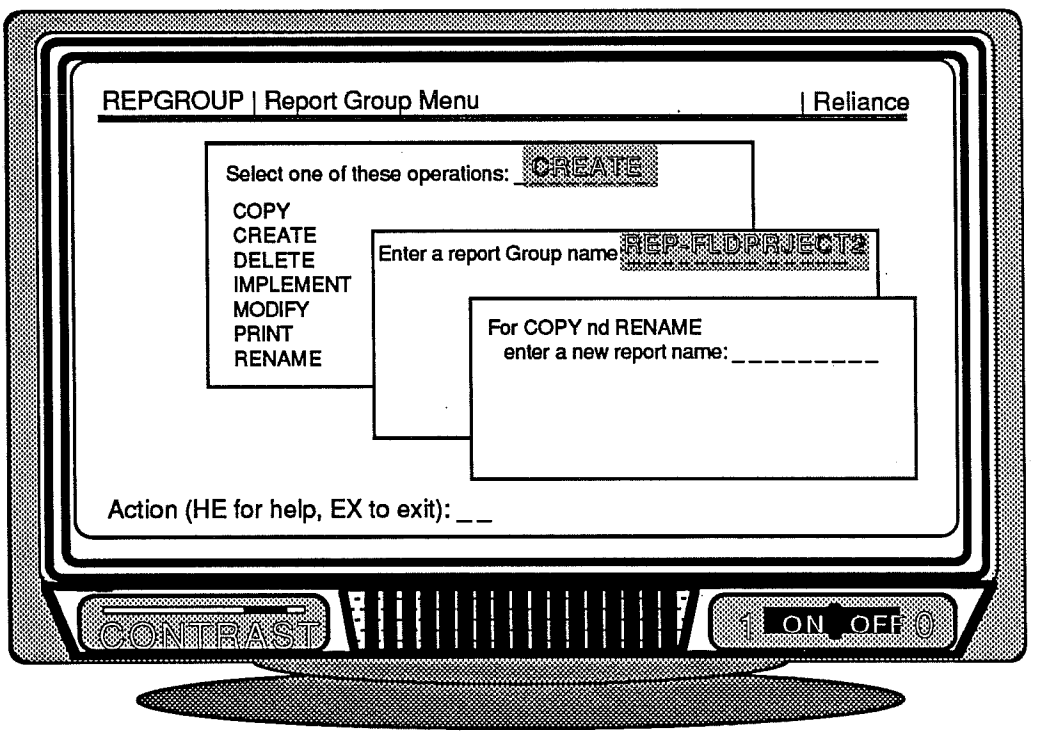


FIGURE 4.4.6.1 - Report Group Menu.

11. At the System Menu, enter REPGROUP and press SEND.

12. The Report Group Menu is displayed. Enter CREATE, press TAB, and enter REP-FLDPROJECT2. Press SEND.

For complete information on the Report Group Menu, refer to "Using Reporter/32, Part II Reference Section," page 10-29 through 10-30.

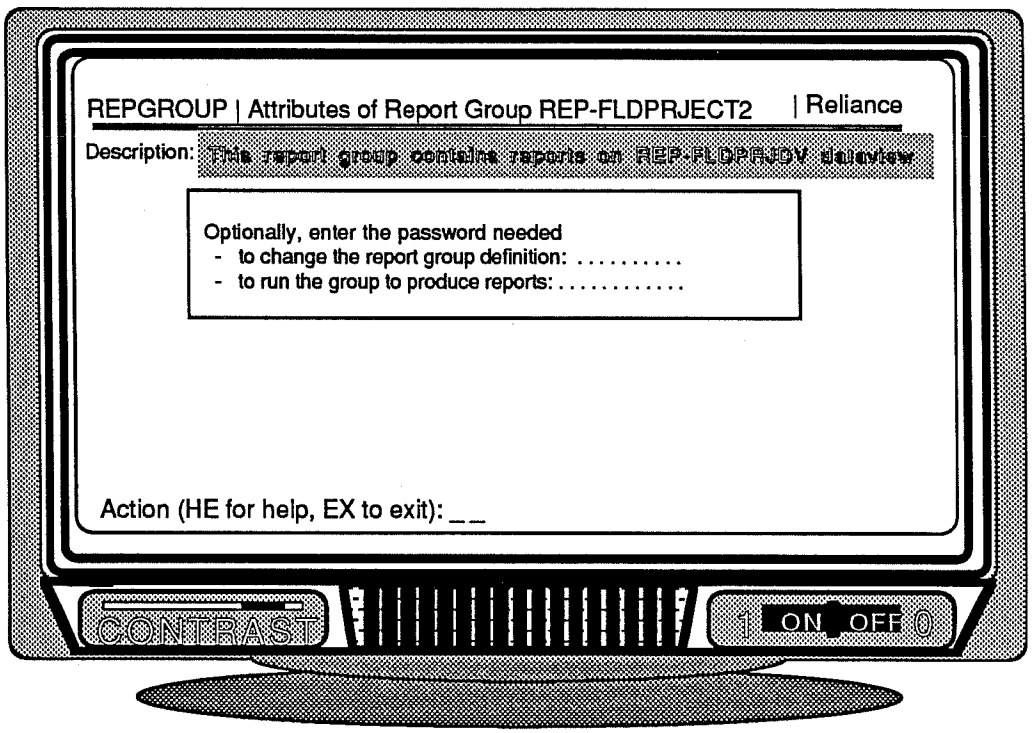


FIGURE 4.4.6.2 - Report Group Attributes Screen.

13. The Report Group Attributes screen is displayed. Enter "This report group contains reports on REP-FLDPRJDV dataview." (don't type the quotes) and press SEND.

For complete information on the Report Group Attribute screen, refer to "Using Reporter/32, Part II Reference Section," page 10-31.

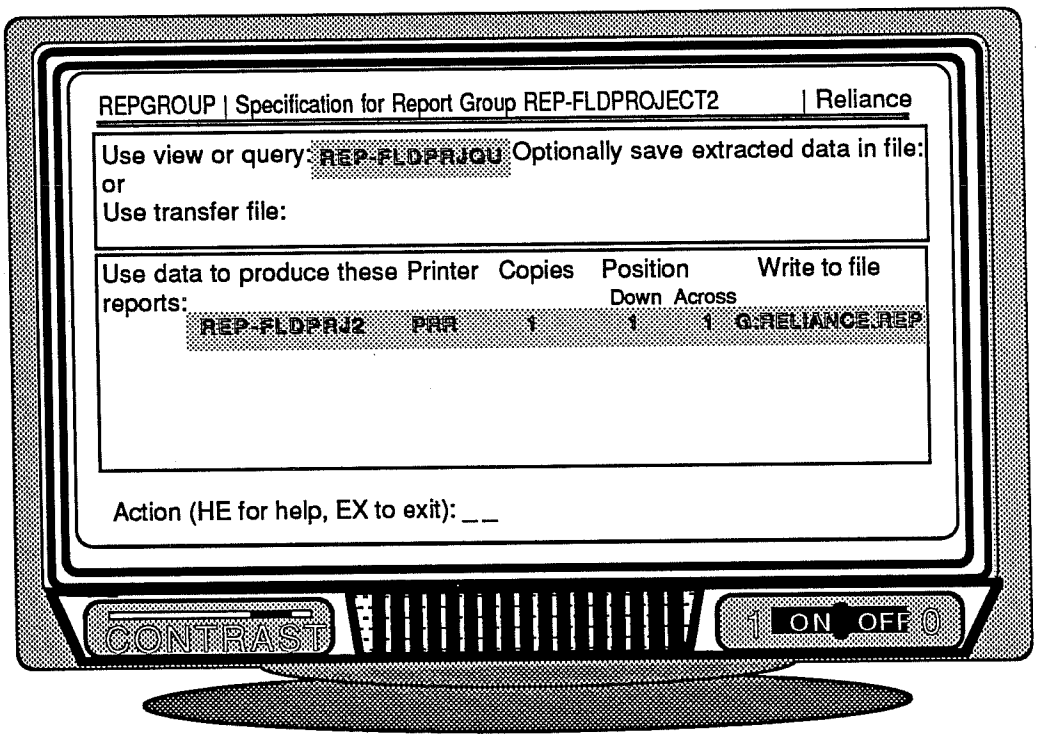


FIGURE 4.4.6.3 - Report Group Specification Screen.

14. The Report Group Specification screen is displayed. Enter REP-FLDPRJQU, press TAB three times, enter REP-FLDPRJ2, press TAB, enter PRR, press TAB, enter 1, press TAB, enter 1, press TAB, enter 1, press TAB, enter G:RELIANCE.REP and press SEND. The Report Group Menu is redisplayed.

    For complete information on the Report Group Specification screen, refer to "Using Reporter/32, Part II Reference Section," pages 10-32 through 10-33.

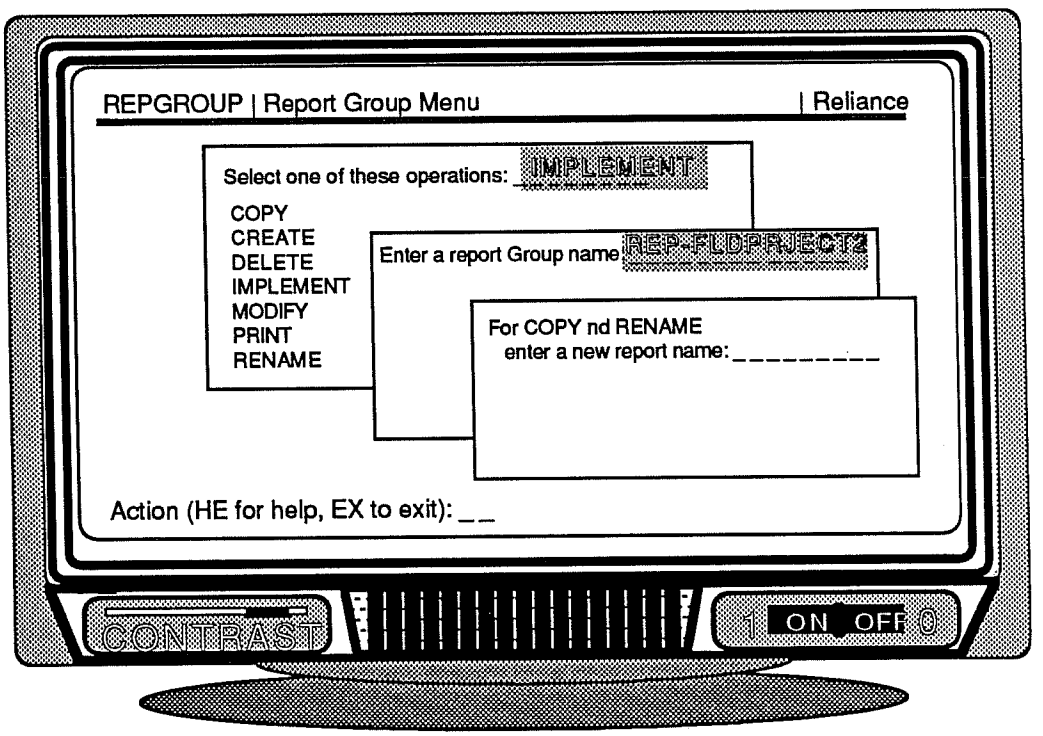


FIGURE 4.4.6.4 - Report Group Menu.

15. On the Report Group Menu, enter IMPLEMENT, press TAB, enter REP-FLDPROJECT2 and press SEND.

16. The Report Group Menu is redisplayed with a message at the bottom of the screen informing the user of implementation. After successful implementation, press the F2 Function Key to return to the System Menu.

4.4.7 Running the Report for Reporter/32.

The implemented Report Group can be run from the Report Production Menu.

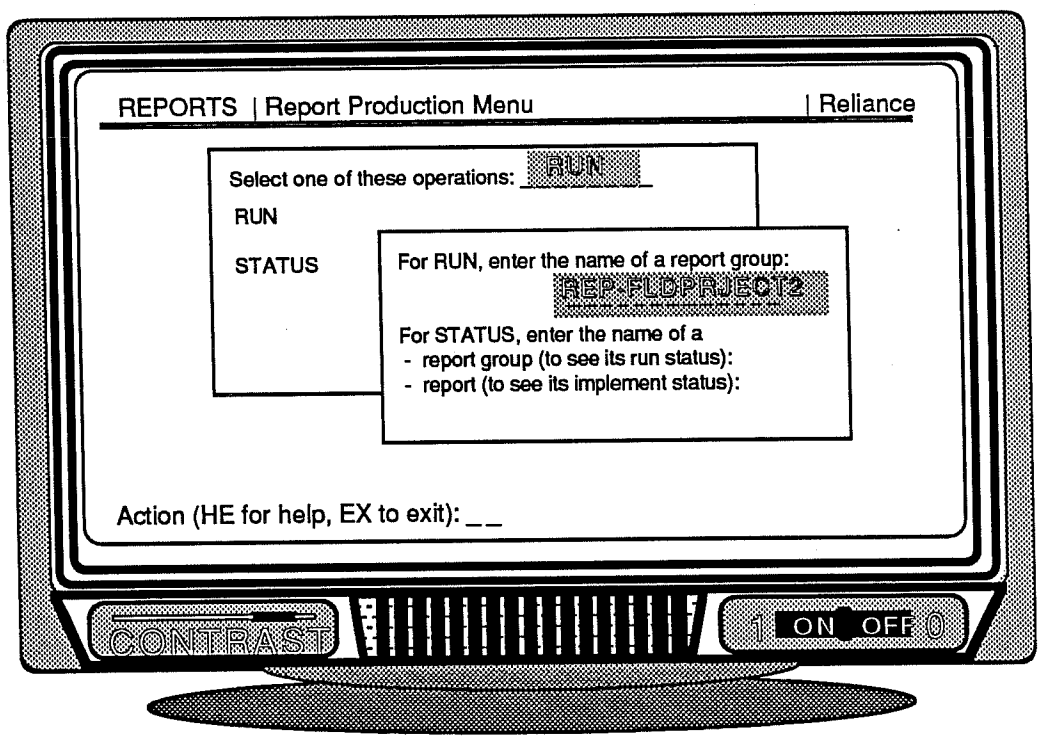


FIGURE 4.4.7.1 - Report Production Menu.

17. At the System Menu, enter REPORTS and press SEND.

18. The Report Production Menu is displayed. Enter RUN, press TAB, enter REP-FLDPROJECT2. Press SEND.

For complete information on the Report Production Menu, refer to "Using Reporter/32, Part II Reference Section," pages 10-36 through 10-37.

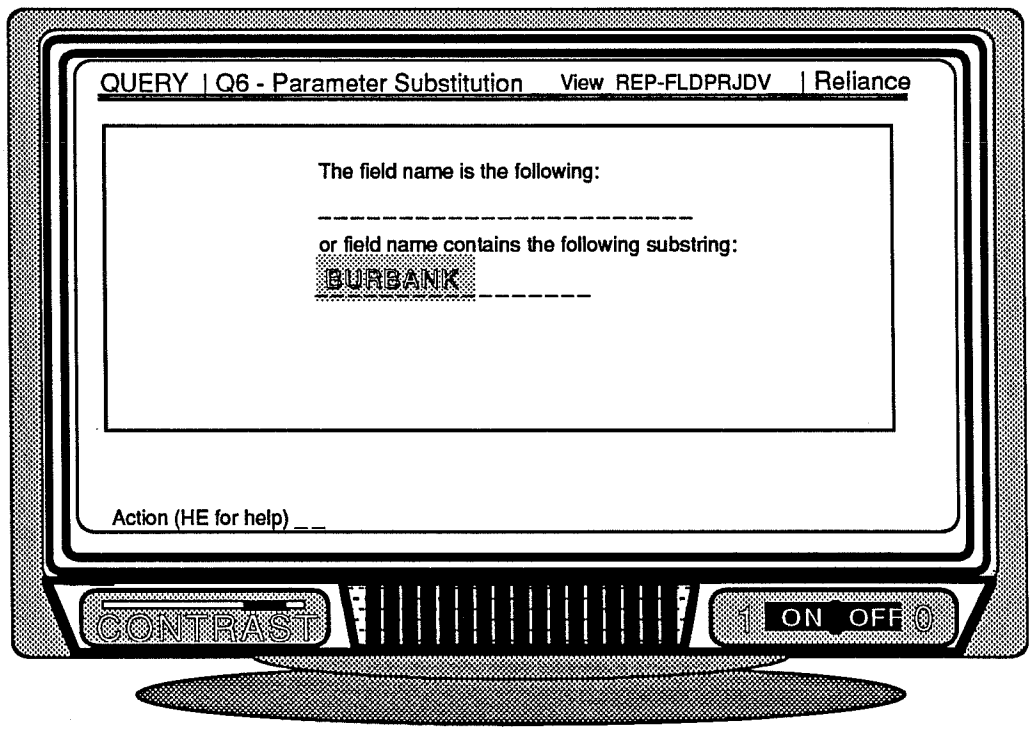


FIGURE 4.4.7.2 - Q6 - Parameter Substitution Screen.

19. The Q6 - Parameter Substitution screen is displayed. Press TAB, enter BURBANK and press SEND.

For complete information on the Q6 - Parameter Substitution screen of the Query transaction, refer to "Relational Query Language (RQL/32) User Guide," pages 5-18 through 5-19.

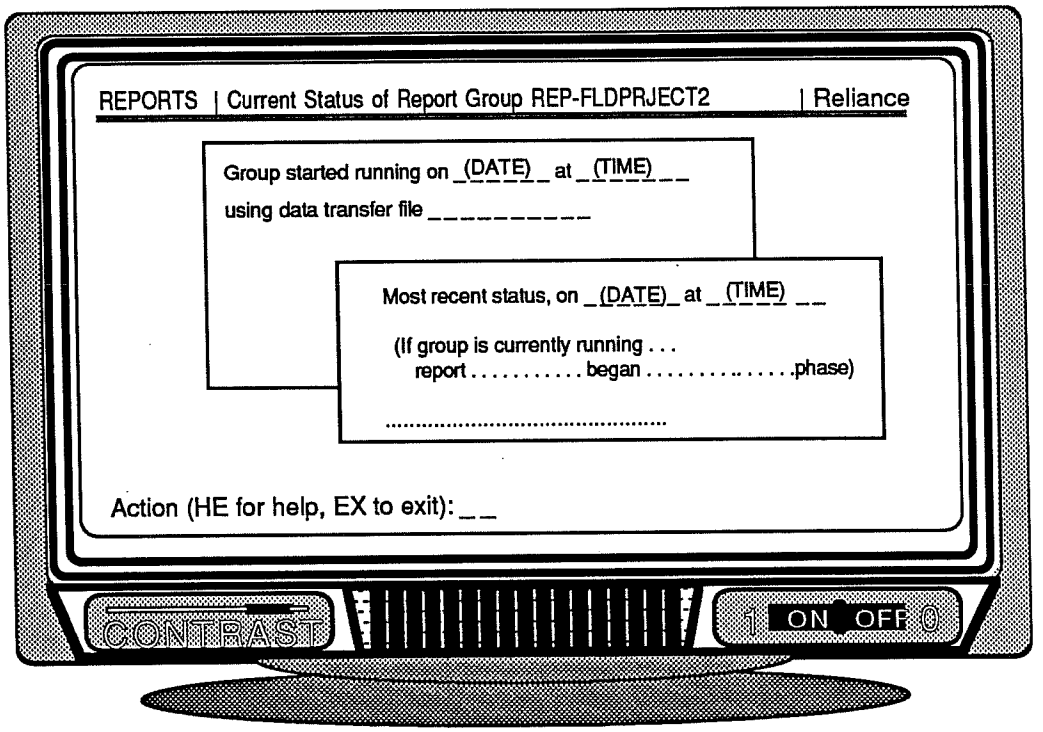


FIGURE 4.4.7.3 - Report Group Status Screen.

21. The Report Group Status screen is displayed with information regarding report group REP-FLDPROJECT2. Press SEND until the message "Report group has finished" is displayed. Then press F1 Function Key to return to the System Menu.

    The report has been printed on the default printer (PRR) and has also been written to an OS/32 indexed file named G:RELIANCE.REP.

    For complete information on the Report Group Status screen, refer to "Using Reporter/32, Part II Reference Section, page 10-38.

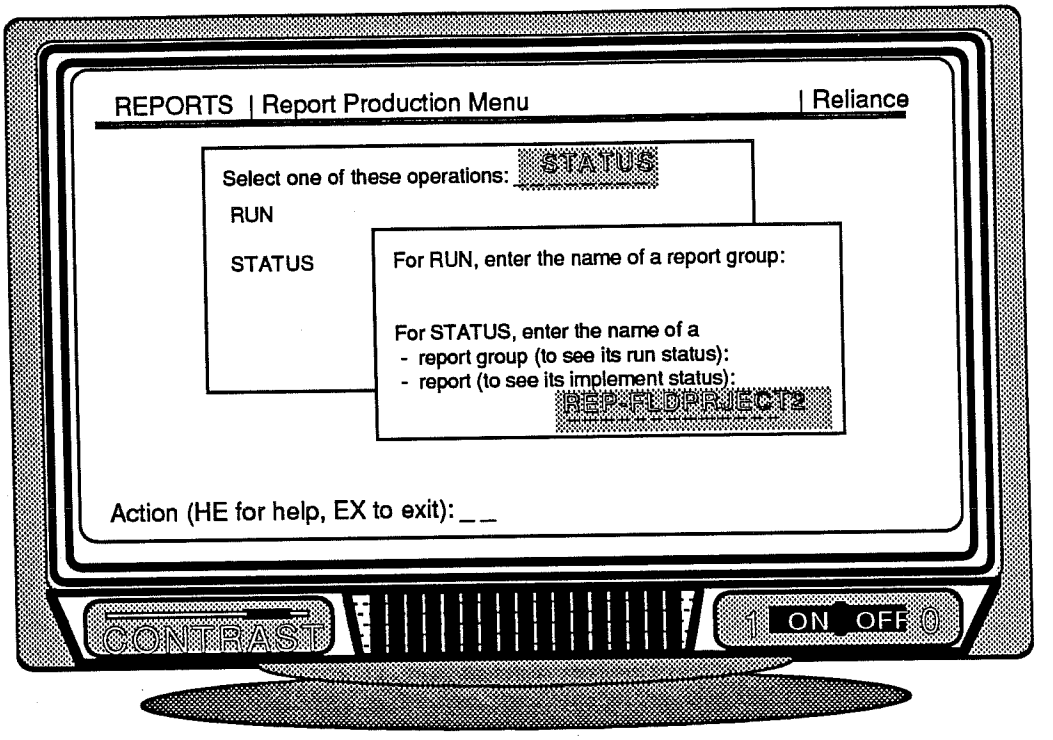


FIGURE 4.4.7.4 - Report Production Menu.

20. The Report Production Menu is displayed. Enter STATUS, press TAB, and enter REP-FLDPROJECT2. Press SEND.

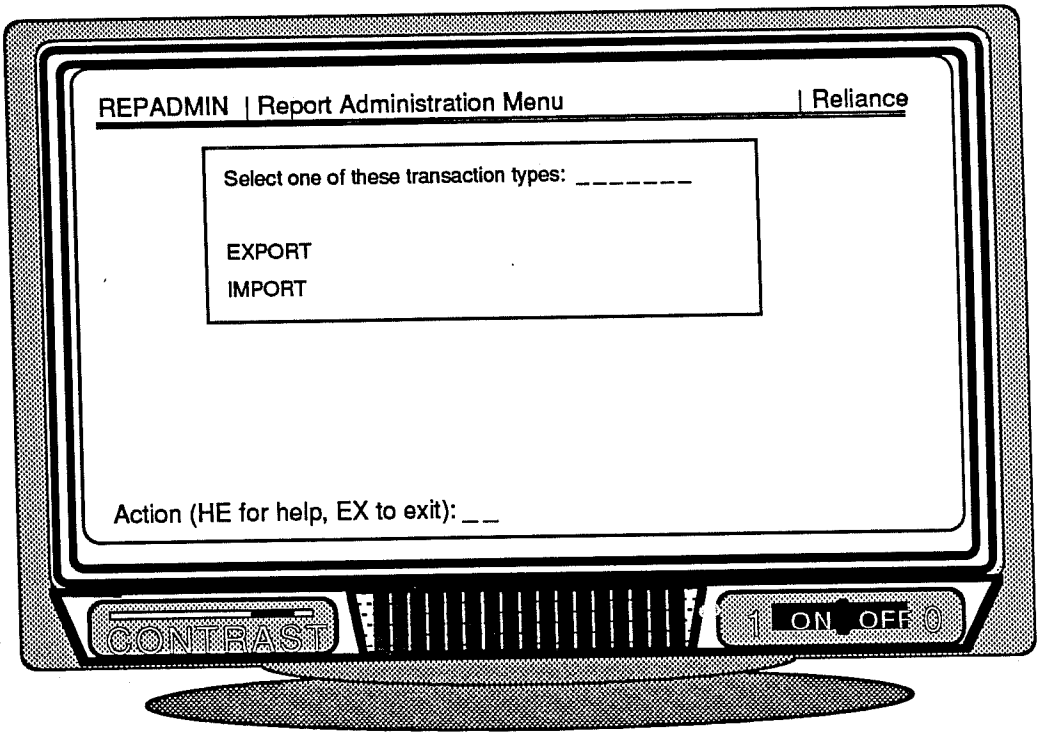


FIGURE 4.4.7.5 - Report Administration Menu.

5. APPLICATION PROGRAMS

Future application programs will be described here. NIPER has written and tested four significant application programs operating interactively from a 6312 display terminal. Each application program supports a screen form/transaction type and takes advantage of the Integrated Transaction Controller (ITC). ITC is a general purpose transaction processing monitor for the Concurrent Computer RELIANCE system operating under OS/32.

The programs are packaged under the name NORIS, standing for National Oil Recovery Information System. NORIS allows the user to select from 7 choices listed on the screen. These choices are called ANNUAL, EASY, QUERY, QUICK, SEARCH, SUMMARY, and TALLY. Each is explained earlier in Chapter 2.

NORIS is a screen driven application program operating under ITC and will support a variety of specialized application steps. Most of the applications are fully functional. However, those that are not functional will give the user a message that they are not operational yet. Descriptions of each are available on the NORIS help screen and individual instructions are to be found under each screen selected. The function keys operate on each screen, but for the screen selection of ANNUAL, QUERY, or EASY, the F7 key is preferred for continuing instead of the SEND key and the F1 key is preferred for returning to the NORIS screen.

5.1 Annual Production

The application program called NORIS found in the RELIANCE System transaction menu will allow direct access to a special query for annual production searches. This selection under NORIS is called ANNUAL and, through an interface invisible to the user, calls a query called ANNREPORT. The Query asks the user for a range of project numbers and a range of report years from which to choose. One project number and/or one report year can be specified.

ANNUAL is actually a part of NORIS which directly interfaces with the parameter substitution screen of a query called ANNREPORT. This screen requests input parameters from the user. Default values are built-in and may be changed using QUERY.

5.2 Easy Does It

The transaction called EASY will allow a special screen to be presented with a large list of query names from which to make a selection. A help screen (F5) shows how to use and update the screen for new queries. These queries are divided into screen displays and line printer reports. As in the transaction, ANNUAL, the selection through EASY permits directly interfacing to the parameter substitution screen of the chosen query. Like the name says, EASY does it.

5.3 Project Summary Report

The application program SUMMARY is functional, but only the project information data file is delivered as output to the line printer for any project number requested.

The size at delivery time is inadequate, so another method was used to give a complete listing of all data under a project number. This program, called TORSALL, operates outside of the ITC environment, and actually references all 13 DMS file for data relating to the project number requested. If the word ALL is entered in SUMMARY, a very large output can be expected in the output file, since the whole data base will be printed. This file can be examined with the OS/32 Editor and later printed onto the line printer if desired.

5.4 Quick Check

The application program called QUICK is an advanced prototype for further useful programs of the same type. The program QUICK will request a project

number from the user, then immediately print out on the screen a select group of variable fields. If the project number does not exist, a message is printed to that effect in the lower left-hand line of the screen. If the SEND key is pressed again, the next project number higher than the one requested will be located and displayed. The forward direction of searching is the default direction and can be changed at any time by placing a "B" in the Search Direction field. A help screen will also give additional information for the user.

Through the use of QUICK, the first or the last project number of any category can be very quickly found. For example, to find the last GURC project, just type in any letter following the word GURC, such as an H, and search backwards using a B in the search direction field.

5.5 Project Tallies

The application program, TALLY, takes a count or tally of all the projects in the database. The tally process takes about 2 minutes. The resulting tally is presented in two screens either of which may be aborted or sent to the line printer. Invisible fields are available on the screen to allow future expansion of the program to tally the projects by state or by area, project, date.

6. ADVANTAGES AND LIMITATIONS

6.1 Advantages of RELIANCE

With properly written application programs that make full use of the transaction units available, the logical consistency of the data base is guaranteed and file data integrity is maintained by properly locking files before modifying them. Records created, updated, or deleted by a program are locked by DMS/32 until termination of the transaction unit either by ending or failing. These record locks are removed by DMS/32 after transaction termination and released to other users.

6.2 Limitations of RELIANCE

The most serious limitation of the RELIANCE data base management system is the lack of a suitable query language that has the ability to select variable fields through the use of boolean logic. A query can do this to a limited extent, but again another limitation imposes itself for this method. This limitation is brought on by the fact that a data view is constrained to a join of a maximum of four DMS files at a time. Another serious limitation is the 2048 byte upper limit on the composite dataviews made from up to 4 DMS files for each dataview. This limitation prevented combining annual production with projects information and other important data retrievals.

Another limitation for the RELIANCE system is the lack of ability for Reporter/32 to access numeric data stored in FORTRAN defined formats, such as REAL*4, REAL*8, or INTEGER. To the users, this means that application programs written to run outside of Reporter/32 or Query, such as TORSALL or SUMMARY will not show a decimal point in the output data, unless each numeric field is individually converted to its proper format. This limits FORTRAN programmers' efficiency and makes COBOL or C the preferred programming language for RELIANCE.

7. GLOSSARY

Glossary of terms from "RELIANCE Overview Manual"

numbered 29-718 F00 R06 08/83 of Revision 7.1.

Action Field	A visible field on the screen that terminates a transaction.
Application Program	A RELIANCE-supplied or user-supplied program which runs in an on-line environment. Application programs can be interactive, and process input messages from the terminal operator and respond to that operator in a matter of seconds, or they can be background, so that the terminal operator does not have to wait for a response.
Attribute	A property of a data definition or of a screen form definition. Different types of definition have different sets of attributes.
Authorized User	A terminal operator can access RELIANCE only if he is an authorized user, with a defined user identifier and signon password.
Composite Dataview	A dataview based on more than one file.
CONTROL	A RELIANCE transaction type which allows a suitably authorized terminal operator to control the RELIANCE environment.
Cursor Position	The position of the cursor on a RELIANCE terminal screen, as detected and controlled by a terminal operator or application program.
Database	A collection of interrelated data with a minimum of redundancy. The data are stored in such a manner as to be independent of programs which access the data.
Database Information Files	Special RELIANCE files which can be read (but not locked, rewritten or deleted), using DMS/32, and which provide information about a DMS/32 database and its files.
Database Inquiry	A facility provided by the QUERY transaction type of RQL/32, for the terminal operator to run inquiries on the database without having a write application programs.
Database Management	The set of DMS/32 and DVAM software which generates, defines, initiates, operates and accesses a database.

Database Name	The name given to a database when the database is generated. The database name is subsequently used by application programs to indicate which database is required. The same name is used for the primary placement area of the database, and for the DMS/32 task.
Data Compaction	An optional process whereby records in a DMS file are fitted into a smaller area on disc than they occupy at the user program interface.
Data Definition	The unit of definition to the Data Dictionary. A data definition describes a piece of data, a record or a file.
Data Dictionary	A RELIANCE software product providing centralized definitions of data (including dataviews) and administration and control of a DMS/32 database.
Data Dictionary Name	The means of identification of a data definition.
Dataview	A relation based upon the fields of one or more DMS files.
Data Management System (DMS/32)	DMS/32 controls a database held in one or more OS/32 contiguous files. The database can contain any number of user-defined RELIANCE files. DMS/32 provides a keyed access method that supports random and sequential access, with data compaction, multiple indexes, and integrity and recovery facilities.
DMS File	A file defined to DMS/32 by means of the Data Dictionary or suitable macro calls, and managed and accessed by DMS/32.
DMS/32 Session	The time between the start and end of a single run of the DMS/32 task.
DMS/32 Task	Perkin-Elmer Data Management System for the 32-byte range of processors.
DMS/32 Application Thread	A sequence of application program operations handled by DMS/32 in parallel with a number of other independent sequences. In a RELIANCE environment, the number of such threads is the same as the number of ITC threads.
Field	The fundamental unit of data.

Field Definition	The type of data definition which allows the definition of the most fundamental piece of data.
File	A file within a database. All the records within such a file have the same format. Each record must contain a unique primary key which can be used to identify the record.
File Definition	The particular type of data definition which describes a file. The file definition describes the physical placement of the file, and refers to a file type definition for its logical structure.
File Type	The data definition type which describes the logical structure of one or more files. It defines the identity of the group which defines the record and the names and key fields of each index.
Format Attributes	The attributes of a visible field which define its appearance on a screen.
Formatted Report	An optionally selected form of output by RQL/32, to produce a listing to the terminal's associated printer, rather than a display to the terminal.
FORTRAN VII	The high-level **FOR**mula **TRAN**slation language widely used in industry, and supported by RELIANCE.
Group	Either: • A collection of fields which are logically related in some way. Within a file definition, they occupy a contiguous area of storage, though not necessarily within a screen form definition. • A set of run units which are ATTACH'ed under the same controlling task, such as the Integrated Transaction Controller.
Implement	The Data Dictionary process of using a file definition to create the file on the database. At the same time a copy of the definition is taken to ensure that a definition accurately reflecting the file on the database is available, despite any later modifications to the definition or its components.
Index	A collection of keys to a file, together with pointers to the corresponding records. There can be more than one index for each file.

Index Name	The identity of a particular index for a file.
Initial Menu	The first menu displayed to a terminal operator after that operator has successfully signed on the RELIANCE system.
Integrated Transaction Controller (ITC)	The transaction processing monitor for RELIANCE, which handles the real-time aspects of transaction processing, such as message scheduling, screen formatting, data validation, and program loading.
Join	An operation which forms a single dataview from records of two, three or four files.
Key	An ordered collection of one or more key field within a record. A key is used to identify the record when retrieving it from a database.
Key Field	A field within the record of a file which makes up part of an index for the file.
Menu	A screen form definition containing a list of transaction types from which the terminal operator can choose.
Message	A string of characters transmitted between a terminal and the computer.
Password	A string of characters used to prevent unauthorized access to a screen form definition, dataview definition, or DMS file definition.
Primary Index	The first index declared when a file is created. It is the index on which all WRITES, REWRITES and ERASES are performed and it may not contain duplicate keys.
Primary Key	The key which uniquely identifies a record in a file. The primary key is held in the primary index for the file.
Primary Placement Area	The OS/32 contiguous file allocated to a database when it is generated (via the Generate Utility). It contains all the control information for the database including the names of any secondary placement areas which may be allocated later.
Query	An interrogation of the database, using the facilities of RQL/32, rather than by writing an application program.

Record	A number of contiguous bytes, containing a key and optionally other data. It is the unit of transfer of data between the user application program and the DMS/32 system. All records within a single file must have the same key format and be of the same, fixed, length.
Relational Query Language (RQL/32)	RELIANCE transaction types which provide an interactive query and report generation facility based on Relational Database processing.
RELIANCE	The high-performance transaction processing system for Perkin-Elmer 32-byte computers.
Screen Form	The layout of the display at a terminal, defined by a screen form.
Security	Is the protection of data against accidental or intentional disclosure to unauthorized persons, or unauthorized modifications, or destructions.
Secondary Index	An additional index to a file other than a Primary Index. Duplicate keys are permitted.
Signon Password	A string of characters which distinguish an authorized user, and which must be supplied to gain access to the RELIANCE system.
Signon Screen	The screen form displayed initially on each RELIANCE terminal, into the appropriate fields of which a user must correctly enter his identifier and password to gain access to the system.
Simple Dataview	USER selected fields from one DMS file.
Update	A change to a database to reflect a changed 'real world' situation.

8. APPENDICES

8.1 - List of application programs, subroutines and libraries

Main Programs	Subroutines
NORIS	TALLIES
QUICK	SFCHECK
TALLY	GETACTN
TALLY2	ACTION
EASY	DMSCHECK
SUMMARY	USMAIL
TORSALL	FLDGET
	PRJGET
	INSGET
Libraries	STMGET
	MISGET
DMSWRKSP.obj	CHMPGET
F7RTLX53.obj	CHMIGET
REL.obj	COMGET
DMS.RTL	ANNGET
	MONGET
	INTGET
	LEAGET
	MICGET

8.2 - ITC DEFINITION FOR RELIANCE SYSTEM TORS

```
DATA          2000,
DBBUFF        6,
DBFILES       30,
DBMAXRU       26,
DBMS          TORSDMS,
DBNAME        J:TORSDMS.DMS,
DBPAGE        4096,
DBSEG         140,
DBSIZE        390625,
DBTHRD        6,
DBVOL         J,
DMSCSS        TORSDMS,
FLOAT         ,
HELP          1,
IDENTIFY      TORS,
INPUT         10, 2000,
ITCCSS        J:TORSITC.CSS,
OUTPUT        10, 2612,
PRINTNOS      1,
PROGRAM       I:TORS.APL, 40, 50000,
RISCSS        J:TORSREL.CSS,
SCREEN        I:TORS.SFL, 40, 9500,
SYSVOL        BP01,
TERMINAL      PRR, PR,
TERMINAL      IT01, CRT, PRR, REM
TERMINAL      IT02, CRT, PRR, REM
TERMINAL      IT03, CRT, PRR, REM
TERMINAL      IT04, CRT, PRR, REM
TERMINAL      IT05, CRT, PRR, REM
TERMINAL      IT06, CRT, PRR, REM
TERMINAL      NO01, CRT, PRR, REM
TERMINAL      NO02, CRT, PRR, REM
TERMINAL      NO03, CRT, PRR, REM
TERMINAL      NO04, CRT, PRR, REM
TERMINAL      NO05, CRT, PRR, REM
TERMINAL      NO06, CRT, PRR, REM
TERMINAL      XCRT, CRT, PRR, REM
TERMNOS       13,
THREADS       5, 2,
TIMEOUT       00:05, 00:30,
VOLUME        J,
```

8.3 - Appendix of Data Dictionary Information

8.3.1 S2K data elements and RELIANCE fields

8.3.2 Report of DMS files, file types and groups

8.3.3 Report of DMS files, file types and groups, primary keys, secondary keys

8.3.1 S2K Data Elements and Reliance Fields
Physical Order of Fields Displayed

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
** DMS FILE MEMBERSHIP : FIELDS						
NONE	NONE	NOT A S2K DATA ELEMENT	FIELD-REC-NO	ANUM	5	X(5)
C0	C6	FIPS-DOE-FIELD-CODE	FIPSDOECODE	ANUM	9	X(9)
C0	C1	FIELD-NAME	FIELD-NAME	ANUM	37	X(37)
C0	C10	FIELD-REGION	FIELD-REGION	ANUM	14	X(14)
C0	C15 C16	GEOLOGICAL-BASIN+GEOL-SUB-BASIN	GEO-BASIN	ANUM	54	X(54)
C0	C17	BASIN-AAPG-CODE	AAPG-BASIN-CODE	NUMBER	3	ZZZ
C0	C2	FIELD-COUNTRY	COUNTRY	ANUM	10	X(10)
C0	C20	FIELD-STATE-CODE	STATE-CODE	ANUM	2	XX
C0	C25	FIELD-COUNTY	COUNTY-PROVNC	ANUM	23	X(23)
C0	C35	REGULATOR-CONSERVATION-DISTRICT	FLD-REG-CON-DIST	ANUM	18	X(18)
C0	C55	FIELD-YEAR-OIL-FOUND	YR-FIELD-FOUND	NUMBER	4	ZZZZ
** Subtotal **					179	
** DMS FILE MEMBERSHIP : PROJ-RSV-INFO						
NONE	NONE	NOT A S2K DATA ELEMENT	PRJ-RSV-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	PROJECT-NUMBER	ANUM	10	X(10)
C0	C6	FIPS-DOE-FIELD-CODE	PRJ-FIPSDOECODE	ANUM	9	X(9)
C425	C430	CLAY-TYPE	CLAY-TYPES	ANUM	55	X(55)
C425	C435	CLAY-WEIGHT-%	CLAY-WEIGHT-PCT	NUMBER	4	ZZ.ZZ
C70 C960 C1310 C330 C975 C1315		LOWEST-PERMEABILITY	PERM-LOWEST	ANUM	11	X(11)
C70	C105	INFORMATION-SOURCE	INFO-SOURCE	ANUM	45	X(45)
C70	C120	OIL-GRAVITY-AVG	OIL-GRAVITY-AVG	NUMBER	3	ZZ.Z
C70	C125	INITIAL-OIL-SATURATION	OIL-SAT-INIT	NUMBER	3	ZZ.Z
C70	C130	PRESENT-OIL-SATURATION	OIL-SAT-PRES	NUMBER	3	ZZ.Z
C70	C150	OIL-SATURATION-QUALIFIER	OIL-SAT-TYPE	ANUM	4	X(4)
C70	C155	INITIAL-WATER-SATURATION	H2O-SAT-INIT	NUMBER	3	ZZ.Z
C70	C160	PRESENT-WATER-SATURATION	H2O-SAT-PRES	NUMBER	3	ZZ.Z
C70	C170	INITIAL-GAS-SATURATION	GAS-SAT-INIT	NUMBER	3	ZZ.Z
C70	C175	PRESENT-GAS-SATURATION	GAS-SAT-PRES	NUMBER	3	ZZ.Z
C70	C185	INITIAL-OIL-MBBL	PRJ-OOIP-MBBL	NUMBER	10	Z(8).ZZ
C70	C190	PRESENT-OIL-MBBL	PRJ-POIP-MBBL	NUMBER	10	Z(8).ZZ
C70	C205	OIL-TYPE	OIL-TYPE	ANUM	27	X(27)
C70	C210	ACID-NUMBER	ACID-NUMBER	ANUM	3	XXX
C70	C215	OIL-VISCOSITY	OIL-VISCOSITY	NUMBER	10	Z(8).ZZ
C70	C220	VISCOSITY-TEMP	OIL-VISC-TEMP	NUMBER	3	ZZZ
C70	C225	GEOMETRIC-CONFIGURATION	PATTERN-TYPE	ANUM	77	X(77)
C70	C230	PROJECT-SIZE-ACRES	PROJECT-ACRES	NUMBER	7	Z(5).ZZ
C70	C235	PATTERN-SIZE-ACRES	PATTERN-ACRES	NUMBER	7	Z(5).ZZ
C70	C240	LITHOLOGY	LITHOLOGY	ANUM	32	X(32)
C70	C250C255	DEPOSITIONAL-ENVIRONEMNT+C255	DEPOS-ENVIRON	ANUM	35	X(35)
C70	C260	DEPTH	DEPTH	NUMBER	5	Z(5)

8.3.1 S2K Data Elements and Reliance Fields
Physical Order of Fields Displayed

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
C70	C265	GROSS-THICKNESS-FEET	GROSS-THICK-FT	NUMBER	7	Z(5).ZZ
C70	C270	NTPY-THICKNESS-FEET	NETPAY-THICK-FT	NUMBER	7	Z(5).ZZ
C70	C285	POROSITY-AVG	POROSITY-AVG	NUMBER	3	ZZ.Z
C70	C295	PRESENT-RESERVOIR-BHTEMP-F	BHT-F-PRESENT	NUMBER	3	ZZZ
C70	C300	INITIAL-RESERVOR-BHP	BHP-PSI-INITIAL	NUMBER	4	ZZZZ
C70	C305	PRESENT-RESERVOIR-BHP	BHP-PSI-PRESENT	NUMBER	4	ZZZZ
C70	C325	HIGHEST-PERMEABILITY	PERM-HIGH-AVG	NUMBER	8	Z(6).ZZ
C70	C335	VARIATION-PERMEABILITY	LORENZ-PERM-COEF	NUMBER	3	Z.ZZ
C70	C340	PERMVAR-CALC-METHOD	DYKSTRA-PARSONS	NUMBER	3	Z.ZZ
C70	C375	GAS-CAP-TYPE	GAS-CAP-TYPE	ANUM	22	X(22)
C70	C380	WATER-DRIVE	H2O-DRIVE	ANUM	19	X(19)
C70	C385	WETTABILITY	WETTABILITY	ANUM	28	X(28)
C70	C390	RESERVOIR-DIP	RSVR-DIP	ANUM	11	X(11)
C70	C395	H2O-SALINITY-PH2O	PROD-H2O-SAL-PPM	ANUM	14	X(14)
C70	C415	ROCK-HETEROGENY	ROCK-HETEROGENY	ANUM	82	X(82)
C70	C75	RESERVOIR-NAME	PROJECT-NAME	ANUM	38	X(38)
C70	C80	RESERVOIR-ID	RSVR-ID-NUM	ANUM	17	X(17)
C70	C85	RESERVOIR-PRODUCTION-FORMATION	PRODUCING-FORM	ANUM	25	X(25)
C70	C90	RESERVOIR-ZONE	PRODUCING-ZONE	ANUM	24	X(24)
C70	C95	RESERVOIR-SYSTEM	RESERVOIR-AGE	ANUM	33	X(33)
C70	C96	RESERVOIR-SERIES	RSV-AGE-AAPG	ANUM	3	XXX
C440	C446	PROJECT-STATUS-CODE	PROJ-STATUS-CODE	ANUM	1	X
C440	C447	PROJECT-STATUS-YEAR	PROJ-STATUS-YEAR	NUMBER	4	ZZZZ
C440	C450	DISCOVERY-YEAR	PRJ-AREA-DISC-YR	NUMBER	4	ZZZZ
C440	C455	SECONDARY-YEAR	PRJ-AREA-SECN-YR	NUMBER	4	ZZZZ
C440	C460	TERTIARY-YEAR	PRJ-AREA-TERT-YR	NUMBER	4	ZZZZ
C440	C470	PRIMARY-PRODUCTION-MBBL	PRJ-PRIMARY-MBBL	NUMBER	11	Z(9).ZZ
C440	C475	SECONDARY-PRODUCTION-MBBL	PRJ-SECN-MBBL	NUMBER	11	Z(9).ZZ
C440	C480	TERTIARY-PRODUCTION-MBBL	PRJ-TERT-MBBL	NUMBER	11	Z(9).ZZ
C440	C481	EST-TERTIARY-OIL-MBBL	PRJ-EST-EOR-MBBL	NUMBER	11	Z(9).ZZ
C440	C485	PREVIOUS-PRODUCTION-METHODS	PREV-PROD-METH	ANUM	54	X(54)
C440	C490	OTHER-TERTIARY-METHODS	OTHER-EOR-METH	ANUM	88	X(88)
C440	C495	DAILY-PRODUCTION-AVG-BBL	PROD-AVG-BPD	NUMBER	6	Z(6)
C440	C500	PRODUCTION-WELLS	PRJ-PROD-WELLS	NUMBER	4	ZZZZ
C440	C505	INJECTION-WELLS	PRJ-INJ-WELLS	NUMBER	4	ZZZZ
C440	C510	SHUTIN-WELLS	PRJ-SHUTIN-WELLS	NUMBER	4	ZZZZ
C440	C515	OBSERVATION-WELLS	PRJ-OBSER-WELLS	NUMBER	4	ZZZZ
C440	C525	PROJ-TOTAL-OIL-EST-MBBL	PRJ-OIL-MBBL-EST	NUMBER	9	Z(9)
C440	C540	LAB-ENGR-DESIGN-BDATE	LAB-DESIGN-BDATE	ANUM	7	X(7)
C440	C545	LAB-ENGR-DESIGN-EDATE	LAB-DESIGN-EDATE	ANUM	7	X(7)
C440	C550	WORKOVER-DRILLING-BDATE	WELLWORK-BDATE	ANUM	7	X(7)
C440	C555	WORKOVER-DRILLING-EDATE	WELLWORK-EDATE	ANUM	7	X(7)
C440	C560	SEQUIP-INSTAL-BDATE	SURF-EQUIP-BDATE	ANUM	7	X(7)
C440	C565	SEQUIP-INSTAL-EDATE	SURF-EQUIP-EDATE	ANUM	7	X(7)

8.3.1 S2K Data Elements and Reliance Fields
Physical Order of Fields Displayed

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
C440	C570	PREFLUSH-BDATE	PREFLUSH-BDATE	ANUM	7	X(7)
C440	C575	PREFLUSH-EDATE	PREFLUSH-EDATE	ANUM	7	X(7)
C440	C580	TER-FLUID-INJ-BDATE	EORFLD-INJ-BDATE	ANUM	7	X(7)
C440	C585	TER-FLUD-INJ-EDATE	EORFLD-INJ-EDATE	ANUM	7	X(7)
C440	C590	INCR-RESPONSE-BDATE	INCR-RESPN-BDATE	ANUM	7	X(7)
C440	C595	PROJECT-MATURITY-DATE-STATUS	PROJECT-STATUS	ANUM	18	X(18)
C440	C600	LAB-ENGR-EST-COST	LAB-DESIGN-COST	NUMBER	11	Z(9).ZZ
C440	C605	SEQUIP-INSTAL-EST-COST	SURF-EQUIP-COST	NUMBER	11	Z(9).ZZ
C440	C610	DOWNHOLE-EQUIP-EST-COST	DNHOLE-EQP-COST	NUMBER	11	Z(9).ZZ
C440	C615	DRILLING-EST-COST	DRILL-EST-COST	NUMBER	11	Z(9).ZZ
C440	C620	PREFLUSH-FLUD-EST-COST	PREFLUSH-COST	NUMBER	11	Z(9).ZZ
C440	C625	TERTIARY-FLUD-EST-COST	EOR-FLUID-COST	NUMBER	11	Z(9).ZZ
C440	C630	ANNUAL-OPNS-MAINT-EST-COST	ANNL-EST-OP-COST	NUMBER	11	Z(9).ZZ
C440	C640	ENVIRONMENT-IMPACT-STUDY-DONE	ENVI-IMPACT-STDY	ANUM	7	X(7)
C440	C645	EIS-AGENCY-NAME	EIS-AGENCY-NAME	ANUM	67	X(67)
C440	C680	METHOD-NAME	PROCESS-NAME	ANUM	43	X(43)
C440	C685	METHOD-CODE	PROCESS-CODE	ANUM	3	XXX
C440	C686	TECHNOLOGY TYPE	TECHNOLOGY-TYPE	NUMBER	2	ZZ
C440	C690	PRODUCER-NAME	PRODUCER-NAME	ANUM	35	X(35)
C440	C695	MAJOR-CO-FLAG	MAJOR-CO-FLAG	ANUM	1	X
C440	C700	PRODUCER-OTHER-NAME	PRODUCER-NAME2	ANUM	41	X(41)
C440	C705	PRODUCER-BLDG-ADDR1	PROD-BLDG-ADDR1	ANUM	38	X(38)
C440	C710	PRODUCER-STREET-ADDR2	PROD-STR-ADDR2	ANUM	29	X(29)
C440	C715	PRODUCER-CITY	PRODUCER-CITY	ANUM	16	X(16)
C440	C720	PRODUCER-STATE	PRODUCER-STATE	ANUM	14	X(14)
C440	C725	PRODUCER-KONTACT	PRODUCER-CONTACT	ANUM	28	X(28)
C440	C730	PRODUCER-KONTACT-PHONE	PRODUCER-PHONE	ANUM	21	X(21)
C440	C735	PARENT-COMPANY	PARENT-COMPANY	ANUM	38	X(38)
C440	C740	OPERATOR-NAME	OPERATOR-NAME	ANUM	36	X(36)
C440	C745	OPERATOR-BLDG-ADDR1	OPER-BLDG-ADDR1	ANUM	38	X(38)
C440	C750	OPERATOR-STREET-ADDR2	OPER-STR-ADDR2	ANUM	27	X(27)
C440	C755	OPERATOR-CITY	OPERATOR-CITY	ANUM	16	X(16)
C440	C760	OPERATOR-STATE	OPERATOR-STATE	ANUM	13	X(13)
C440	C765	OPERATOR-KONTACT	OPERATOR-CONTACT	ANUM	27	X(27)
C440	C770	OPERATOR-KONTACT-PHONE	OPERATOR-PHONE	ANUM	24	X(24)
** Subtotal **					1718	
** DMS FILE MEMBERSHIP : IN-SITU-INFO						
NONE	NONE	NOT A S2K DATA ELEMENT	INSITU-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	INSITU-PROJ-NO	ANUM	10	X(10)
C440	C685	METHOD-CODE	SITU-PROCES-CODE	ANUM	3	XXX
C825	C830	INSITU-ADDITIVE	INSITU-ADDITIVE	ANUM	26	X(26)
C775	C780	INJECTED-AIR-VOL-PV	INJ-AIR-VOL-PV	NUMBER	5	ZZ.ZZZ

8.3.1 S2K Data Elements and Reliance Fields
Physical Order of Fields Displayed

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
C775	C785	INJECTED AIR-VOL-TOT-MMSCF	INJ-AIRVOL-MMSCF	NUMBER	9	Z(9)
C775	C790	INJECTION-RATE-AVG-MSCFD	INJRAT-AVG-MSCFD	NUMBER	8	Z(8)
C775	C795	SURFACE-INJ-PRESS-AVG	SURF-INJPRES-AVG	NUMBER	5	Z(5)
C775	C800	COMBUSTION-TYPE	COMBUSTION-TYPE	ANUM	3	XXX
C775	C805	INJ-H2O-GAS-RATIO	INJ-H2OAIR-RATIO	ANUM	12	X(12)
C775	C810	H2O-INJ-METHOD	IP-H2O-INJ-METHD	ANUM	10	X(10)
C775	C815	H2O-INJ-VOL-PV	IP-H2O-INJ-PV	NUMBER	6	ZZZ.ZZ
C775	C820	H2O-INJ-VOL-TOT-MBBL	IP-H2O-INJ-MBBL	NUMBER	9	Z(7).ZZ
** Subtotal **					111	
** DMS FILE MEMBERSHIP : STEAM-INFO						
NONE	NONE	NOT A S2K DATA ELEMENT	STEAM-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	STEAM-PROJ-NO	ANUM	10	X(10)
C440	C685	METHOD-CODE	STM-PROCES-CODE	ANUM	3	XXX
C905	C910	STEAM-ADDITIVE	STEAM-ADDITIVE	ANUM	54	X(54)
C915	C920	STEAM-FUEL	STEAM-FUEL	ANUM	50	X(50)
C870	C875	STEAM-PROJ-TYPE	STM-PROJ-TYPE	ANUM	62	X(62)
C870	C880	TOTAL-STEAM-INJECTED-TONS	TOT-STM-INJ-TONS	NUMBER	9	Z(9)
C870	C885	STEAM-INJ-RATE-PERDAY-TONS	STM-INJ-TONS-DAY	NUMBER	5	Z(5)
C870	C890	STEAM-INJ-TEMP	STEAM-INJ-TEMP-F	NUMBER	4	ZZZZ
C870	C895	STEAM-INJ-PRESSURE	STEAM-INJ-PRES	NUMBER	4	ZZZZ
C870	C900	STEAM-INJ-QUALITY-%	STM-INJ-QUAL-PCT	NUMBER	4	ZZZ.Z
** Subtotal **					210	
** DMS FILE MEMBERSHIP : MISCIBLE-IMM-INF						
NONE	NONE	NOT A S2K DATA ELEMENT	MIS-IMM-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	MIS-IMM-PROJ-NO	ANUM	10	X(10)
C440	C685	METHOD-CODE	MI-IM-PROCESCODE	ANUM	3	XXX
C1260	C1265	DRIVE-FLUID	DRIVE-FLUIDS	ANUM	64	X(64)
C1260	C1270	DRIVE-FLUID-AMOUNT	DRIVE-FLUID-AMTS	ANUM	25	X(25)
C1170	C1175	FLUID-MI	TYPE-MI-GAS-INJ	ANUM	35	X(35)
C1170	C1185	INJECTED-H2O-GAS-RATIO	INJ-H2OGAS-RATIO	ANUM	10	X(10)
C1170	C1190	WATER-INJ-METHOD	GP-H2O-INJ-METHD	ANUM	13	X(13)
C1170	C1195	M-LEVEL-EXPECTED	AMT-MIS-EXPECTED	ANUM	21	X(21)
C1170	C1200	MOLE-WEIGHT-C5P	MOLE-WEIGHT-C5P	NUMBER	3	ZZZ
C1170	C1205	MOLE-WEIGHT-C7P	MOLE-WEIGHT-C7P	NUMBER	3	ZZZ
C1170	C1210	MOLE-FRAC-C1N2	C1N2-IN-OIL-MOLE	NUMBER	5	Z.ZZZZ
C1170	C1215	MOLE-FRAC-CO2	CO2-IN-SLUG-MOLE	NUMBER	5	Z.ZZZZ
C1170	C1220	WATER-INJ-PV	GP-H2O-INJ-PV	NUMBER	5	ZZ.ZZZ
C1170	C1225	WATER-INJ-VOL-AMT	GP-H2O-INJ-MBBL	NUMBER	10	Z(8).ZZ
C1170	C1235	INJECTED-MI-FLUID-POR-VOL	EOR-FLUID-INJ-PV	NUMBER	5	ZZ.ZZZ
C1170	C1240	INJECTED-TOT-MI-FLUID-AMT	TOT-EORFLUID-INJ	ANUM	48	X(48)
C1170	C1245	CO2-OIL-MISC-BHP	CO2-MIS-PRES-BHT	NUMBER	4	ZZZZ

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
C1170	C1250	OTHGAS-INJ	OTHER-GAS-INJ	ANUM	10	X(10)
C1170	C1255	MOLE-FRAC-OTHGAS	MOLE-FRAC-OTHGAS	NUMBER	4	ZZ.ZZ
** Subtotal **					288	
** DMS FILE MEMBERSHIP : CHEMICAL-PROJ-IN						
NONE	NONE	NOT A S2K DATA ELEMENT	CHEM-PRJ-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	CHEM-PROJ-NO	ANUM	10	X(10)
C440	C685	METHOD-CODE	CHEM-PROCES-CODE	ANUM	3	XXX
C960	C1005	INITIAL-H2O-DIVALENT-IONS	ORIG-DIVLNT-IONS	NUMBER	6	Z(6)
C960	C1010	PRODUCED-H2O-DIVALENT-ION S	CUR-PROD-DI-IONS	NUMBER	6	Z(6)
C960	C1015	INJECTED-H2O-DIVALENT-ION S	INJ-DIVALNT-IONS	NUMBER	6	Z(6)
C960	C965	WATER-SOURCE	WATER-SOURCE	ANUM	41	X(41)
C1310	C1345	MOBILITY-H2O-OIL-UNTREATE D	MOBRATIO-POLYOIL	NUMBER	7	Z(5).ZZ
C1310	C1350	MOBILITY-H2O-OIL-ENHANCED	MOBRATIO-H2O-OIL	NUMBER	7	Z(5).ZZ
C1310	C1355	PREFLUSH-TYPE	PREFLUSH-TYPE	ANUM	23	X(23)
C960 C1310	C1000C1330	WATER-SALINITY-PPM+H2O-SA LINTY-PPM	INJ-H2O-SALN-PPM	NUMBER	7	Z(7)
C960 C1310	C980 C1360	INITIAL-DISSOLVED-SOLIDS- MPPM	DIS-SOLIDS-ORIG	NUMBER	7	Z(5).ZZ
C960 C1310	C985 C1365	PRODUCED-DISSOLVED-SOLIDS -MPPM	DIS-SOLIDS-PROD	NUMBER	7	Z(5).ZZ
C960 C1310	C990 C1370	INJECTED-DISSOLVED-SOLIDS -MPPM	DIS-SOLIDS-INJ	NUMBER	7	Z(5).ZZ
C960 C1310	C995 C1375	DISSOLVED-SOLIDS-TYPE	DIS-SOLIDS-TYPE	ANUM	14	X(14)
C960 C1380	C1020C1045C1065 C1105C1385	PREFLUSH-AGENT+SLUG-TYPE, ET AL	CHEMICAL-TYPES	ANUM	104	X(104)
** Subtotal **					260	
** DMS FILE MEMBERSHIP : CHEMICAL-INFO						
NONE	NONE	NOT A S2K DATA ELEMENT	CHEM-INFO-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	CHEM-INFO-NO	ANUM	10	X(10)
C960	C1040	PREFLUSH-PH-FACTOR	PRFLSH-PH-FACTOR	ANUM	6	X(6)
C960	C1061	MOLE-WEIGHT-SURFACTANT	MOLE-WT-SURFACT	NUMBER	4	ZZZZ
C960 C1100C1380	C1020C1045C1065 C1105C1385	PREFLUSH-AGENT+SLUG-TYPE, ET AL	CHEMICAL-TYPE	ANUM	55	X(55)
C960 C1100C1310	C1035C1095C1110 C1335	POLYMER-CONC-PPM+ET AL	CONC-EORCHEMS	ANUM	29	X(29)
C960 C1115C1390	C1025C1080C1130 C1405	INJECTED-TOT-MI-FLUID-AMT +ET ALL	AMT-EORCHEM-INJ	ANUM	73	X(73)
C960 C1115C1390	C1070C1125C1400	CHEMICAL-MANUFACTURER	CHEM-MANUFACTUR	ANUM	18	X(18)
C960 C1115C1390	C1075C1120C1395	CHEMICAL-NAME	CHEMICAL-NAME	ANUM	52	X(52)
C960 C1310	C1030C1055C1085 C1320	INJECTED-MI-FLUID-POR-VOL +ET AL	SLUG-PV	NUMBER	9	Z(5).Z(4)

8.3.1 S2K Data Elements and Reliance Fields
Physical Order of Fields Displayed

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
C960 C1310	C1050C1090C1325	SLUG-VISCOSITY	SLUG-VISCOSITY	NUMBER	8	Z(6).ZZ
C960 C1310	C1060C1340	SLUG-ABSORPTION-LOSS	ABSORPTION-LOSS	NUMBER	6	Z(6)
** Subtotal **					275	
** DMS FILE MEMBERSHIP : PRJ-RSV-COMMENTS						
NONE	NONE	NOT A S2K DATA ELEMENT	COMM-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	COMM-PROJ-NO	ANUM	10	X(10)
C70 COMMENTS	C420	RSVR-MISC-INFO1	RSVR-DETAILS1	ANUM	80	X(80)
C70 COMMENTS	C421	RSVR-MISC-INFO2	RSVR-DETAILS2	ANUM	80	X(80)
C70 COMMENTS	C422	RSVR-MISC-INFO3	RSVR-DETAILS3	ANUM	80	X(80)
C70 COMMENTS	C423	RSVR-MISC-INFO4	RSVR-DETAILS4	ANUM	80	X(80)
C70 COMMENTS	C424	RSVR-MISC-INFO5	RSVR-DETAILS5	ANUM	80	X(80)
C835 C925	C840 C930	IS-REM1,STM-REM1,MIC-REM1	PROJ-DETAILS1	ANUM	80	X(80)
C1135C1275C1410	C1140C1280C1415	,MI1,POL1				
C835 C925	C845 C935	IS-REM1STM-REM2MIC-REM2MI	PROJ-DETAILS2	ANUM	80	X(80)
C1135C1275C1410	C1145C1285C1420	-REM2PREM2				
C835 C925	C850 C940	IS-REM3STM-REM3MIC-REM3MI	PROJ-DETAILS3	ANUM	80	X(80)
C1135C1275C1410	C1150C1290C1425	-REM3PREM3				
C835 C925	C855 C945	IS-REM4STM-REM4MIC-REM4MI	PROJ-DETAILS4	ANUM	80	X(80)
C1135C1275C1410	C1155C1295C1430	-REM4PREM4				
C1170	C1230	IMMIS-EXPLANATION (FIRST 80 BYTES)	IMMIS-DETAILS1	ANUM	80	X(80)
C1170	C1230	IMMIS EXPLANATION (LAST 85 BYTES)	IMMIS-DETAILS2	ANUM	85	X(85)
C1940	C1972	BAC-REMARKS	BAC-DETAILS	ANUM	80	X(80)
** Subtotal **					980	
** DMS FILE MEMBERSHIP : ANNUAL-PROJ-INFO						
NONE	NONE	NOT A S2K DATA ELEMENT	ANNREP-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	ANNREP-PROJ-NO	ANUM	10	X(10)
C1470	C1475	PROJ-REPORT-YEAR	ANN-REP-YEAR	NUMBER	4	ZZZZ
C1470	C1480	PROJ-TOTAL-PRODUCED-OIL-M BPD	ANN-PRD-OIL-MBBL	NUMBER	10	Z(8).ZZ
C1470	C1485	PROJ-TOTAL-PRODUCED-GAS-M MCFPD	ANN-PRODGAS-MMCF	NUMBER	10	Z(8).ZZ
C1470	C1490	PROJ-TOTAL-PRODUCED-WATER -MBPD	ANN-PRD-H2O-MBBL	NUMBER	12	Z(10).ZZ
C1470	C1495	PROJ-INCREMENTAL-OIL-MBPD	ANN-INCR-OILMBBL	NUMBER	12	Z(10).ZZ
C1470	C1497	PROJ-TOTAL-INJECTION-WATE R-MBPD	ANN-INJ-H2O-MBBL	NUMBER	12	Z(10).ZZ
C1470	C1500	PROJ-TOTAL-INJECTION-GAS- MMCFPD	ANN-INJ-GAS-MMCF	NUMBER	12	Z(10).ZZ
C1470	C1502	PROJ-TOTAL-INJECTION-OTHE R	ANN-INJ-OTHER	NUMBER	12	Z(10).ZZ
C1470	C1501	ANNUAL-PROJ-REMARKS	ANN-PRJ-REMARKS	ANUM	80	X(80)

8.3.1 S2K Data Elements and Reliance Fields
Physical Order of Fields Displayed

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
NONE	NONE	NOT A S2K COMPONENT	CURR-OPERATOR	ANUM	25	X(25)
NONE	NONE	NOT A S2K COMPONENT	CURR-OP-ADDR	ANUM	35	X(35)
NONE	NONE	NOT A S2K COMPONENT	OP-CITY-ST	ANUM	35	X(35)
NONE	NONE	NOT A S2K COMPONENT	ZIPCODE	ANUM	6	X(6)
NONE	NONE	NOT A S2K COMPONENT	CURR-REP-CONTACT	ANUM	25	X(25)
NONE	NONE	NOT A S2K COMPONENT	CONTACT-PHONE	ANUM	13	X(13)
NONE	NONE	NOT A S2K COMPONENT	ANN-PROJ-AREA	NUMBER	6	Z(6)
NONE	NONE	NOT A S2K COMPONENT	CURR-PRESSURE	NUMBER	4	ZZZZ
NONE	NONE	NOT A S2K COMPONENT	CURR-TEMP-F	NUMBER	3	ZZZ
NONE	NONE	NOT A S2K COMPONENT	ANN-PROCESS-TYPE	ANUM	40	X(40)
NONE	NONE	NOT A S2K COMPONENT	ANN-HEAVYOIL-API	NUMBER	3	ZZ.Z
NONE	NONE	NOT A S2K COMPONENT	ANN-HEVOIL-PTYPE	ANUM	40	X(40)
C1470	C1476	ANNUAL-PRODUCTION-WELLS	ANN-PROD-WELLS	NUMBER	4	ZZZZ
C1470	C1477	ANNUAL-INJECTION-WELLS	ANN-INJ-WELLS	NUMBER	4	ZZZZ
C1555C1585C1685 C1745C1785C1820	C1570C1605C1730 C1770C1800C1840	WELLHEAD-AVG-INJ-PRESS-PS I	SURF-INJ-PRESS	NUMBER	8	Z(8)
C1555C1585C1685 C1820	C1565C1590C1715 C1835	INJ-H2O-AVE-PERDAY-BPD	FLUID-INJ-BPD	NUMBER	8	Z(8)
C1555C1745C1785	C1560C1755C1795	INJ-AIR-RATE-AVG-PERDAY-M CFPD	AIR-GAS-INJ-RATE	NUMBER	10	Z(10)
C1585	C1600	WELLHEAD-AVG-INJ-STEAM-TE MP-F	WELLHEAD-TEMP-F	NUMBER	3	ZZZ
C1585	C1610	STEAM-ADDITIVE-AMOUNT	STM-ADDITIVE-AMT	NUMBER	9	Z(9)
C1585	C1615	STEAM-ADDITIVE-TYPE	STM-ADDTIVE-TYPE	ANUM	20	X(20)
C1585C1630C1685 C1820	C1595C1645C1695 C1825	TOTAL-STEAM-INJECTED-BBL	EORFLUID-INJ-BBL	NUMBER	9	Z(9)
C1585C1745C1785 C1820	C1690C1750C1790 C1845	MIS-TYPE-GAS + IMM-TYPE-GAS	TYPE-INJECTANT	ANUM	20	X(20)
C1630	C1655	INJ-POLYMER-DRIVE-WATER-B BLS	P-DRIVE-INJ-BBL	NUMBER	8	Z(8)
C1630	C1660	INJ-POLYMER-DRIVE-WATER-%	P-DRIVE-INJ-PCT	NUMBER	4	ZZZ.Z
C1630	C1670	MICRO-POLYMER-TYPE	POLYMER-TYPE	ANUM	30	X(30)
C1630C1685	C1635C1720	PREFLUSH-INJ-BBLS+ALK-PRE LF-IJ-BBLS	PREFLUSH-INJ-BBL	NUMBER	8	Z(8)
C1630C1685	C1640C1725	PREFLUSH-INJ-%+ALK-PREFLU SH-INJ-%	PREFLUSH-INJ-PCT	NUMBER	4	ZZZ.Z
C1630C1685C1820	C1650C1700C1830	MICELLAR-SLUG-INJ-%	CHEM-SLUG-PCT	NUMBER	4	ZZZ.Z.
C1630C1685C1820	C1665C1705C1850	INJ-CHASE-H2O-BBLS+POLYME R C1850	CHAS-H2O-INJ-BBL	NUMBER	8	Z(8)
C1685	C1710	ALK-INJ-CHASE-H2O-%	CHAS-H2O-INJ-PCT	NUMBER	4	ZZZ.Z
C1745	C1760	TOTAL-GAS-INJECTED	CUM-GAS-INJ-MMCF	NUMBER	10	Z(10)
C1745	C1765	MINIMUM-MISCIBILITY-PRES- PSI	MIN-MISC-PRS-PSI	NUMBER	6	Z(6)
C1785	C1805	GAS-SOURCE	GAS-SOURCE	ANUM	20	X(20)
** Subtotal **					615	

8.3.1 S2K Data Elements and Reliance Fields
Physical Order of Fields Displayed

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
** DMS FILE MEMBERSHIP : MONTHLY-PROD-INF						
NONE	NONE	NOT A S2K DATA ELEMENT	MD-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	MD-PROJ-NO	ANUM	10	X(10)
C1505	C1510	MONTHLY-PROD-MONTH-YEAR-M MYY	MD-PROD-YYYYMM	ANUM	8	X(8)
C1505	C1515	MONTHLY-PROD-OIL-BPD	MD-PROD-OIL-BPD	NUMBER	12	Z(10).ZZ
C1505	C1520	MONTHLY-PROD-INCREM-OIL-B PD	MD-INCM-OIL-BPD	NUMBER	12	Z(10).ZZ
C1505	C1525	MONTHLY-PROD-H2O-BPD	MD-PROD-H2O-BPD	NUMBER	12	Z(10).ZZ
C1505	C1530	MONTHLY-PROD-GAS-MCFPD	MD-PRODGAS-MCFPD	NUMBER	12	Z(10).ZZ
C1505	C1535	MONTHLY-INJ-H2O-BPD	MD-INJ-H2O-BPD	NUMBER	12	Z(10).ZZ
C1505	C1540	MONTHLY-INJ-GAS-MCFPD	MD-INJ-GAS-MCFPD	NUMBER	12	Z(10).ZZ
C1505	C1545	MONTHLY-INJ-OTHER-BPD	MD-INJ-OTHR-BPD	NUMBER	12	Z(10).ZZ
** Subtotal **					107	
** DMS FILE MEMBERSHIP : INTEREST-INFO						
NONE	NONE	NOT A S2K DATA ELEMENT	INTEREST-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	INTEREST-PROJ-NO	ANUM	10	X(10)
C1445	C1450	INTEREST-NAME	INTEREST-NAME	ANUM	50	X(50)
C1445	C1455	FRACTION-INVOLVED	INTEREST-FRACTN	NUMBER	8	ZZZ.Z(5)
** Subtotal **					73	
** DMS FILE MEMBERSHIP : LEASE-INFO						
NONE	NONE	NOT A S2K DATA ELEMENT	LEASE-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	LEASE-PROJ-NO	ANUM	10	X(10)
C1460	C1465 (FIRST 120 BYTES)	LEASE-NAME	LEASE-NAME	ANUM	120	X(120)
C1460	C1465 (REMAINING 74 BYTES)	LEASE-NAME	LEASE-NAME2	ANUM	74	X(74)
** Subtotal **					209	
** DMS FILE MEMBERSHIP : MICROBIAL-PROJEC						
NONE	NONE	NOT A S2K DATA ELEMENT	MICROB-REC-NO	ANUM	5	X(5)
C440	C445	PROJECT-NUMBER	MICROB-PROJ-NO	ANUM	10	X(10)
C1900	C1902	PH-BEFORE-BAC-INJECTION	PH-BEFOR-BAC-INJ	NUMBER	4	ZZ.Z9
C1900	C1904	RESERVOIR-GAS-BEFORE	RSVR-GAS-BEFORE	ANUM	15	X(15)
C1900	C1906	INDIGENOUS-BACTERIA	INDIGENOUS-BAC	ANUM	40	X(40)
C1900	C1908	PREFLUSH-TYPE	B-PREFLUSH-TYPE	ANUM	40	X(40)
C1900	C1910	BACTERIA-INJECTED-NAME	BACTERIA-IJ-NAME	ANUM	40	X(40)
C1900	C1912	BACTERIA-INJ-CONC	BACTERIC-IJ-CONC	NUMBER	9	Z(8).Z
C1900	C1914	BACTERIA-INJ-VOLUME	BACTERIA-IJ-VOL	ANUM	40	X(40)
C1900	C1916	NUTRIENT-SLUG-TYPE	NUTRNT-SLUG-TYPE	ANUM	40	X(40)
C1900	C1918	NUTRIENT-SLUG-CONC	NUTRNT-SLUG-CONC	ANUM	25	X(25)

8.3.1 S2K Data Elements and Reliance Fields
Physical Order of Fields Displayed

S2K Record Membership(s)	S2K Data Element Number	S2K Data Element Name	Reliance Data Dictionary Name	Type of Field	Length	Edit Picture
C1900	C1920	NUTRIENT-SLUG-VOLUME	NUTRNT-SLUG-VOL	NUMBER	4	ZZZ.Z
C1900	C1922	OTHER-INJECTANTS	OTHER-INJECTANTS	ANUM	40	X(40)
C1900	C1924	SOAK-PERIOD	SOAK-PERIOD	NUMBER	4	ZZZ.Z
C1900	C1926	PH-AFTER-BAC-INJ	PH-AFTER-BAC-INJ	NUMBER	4	ZZ.ZZ
C1900	C1928	OIL-VISC-AFTER-INJ	OIL-VIS-AFTER-IJ	NUMBER	10	Z(8).ZZ
C1900	C1930	GAS-TYPE-PRODUCED-AFTER	GAS-PROD-AFTER	ANUM	40	X(40)
C1900	C1932	BACTERIA-RECOVERED-AFTER	BAC-RECVED-AFTER	ANUM	40	X(40)
C1940	C1942	BACTERIA-GENUS-SPECIES	BAC-GENUS-SPECS	ANUM	40	X(40)
C1940	C1944	OTHER-BACTERIA-NAME	OTHER-BAC-NAME	ANUM	40	X(40)
C1940	C1946	ANAEROBIC	ANAEROBIC	ANUM	8	X(8)
C1940	C1948	SPORE-FORMING	SPORE-FORMING	ANUM	8	X(8)
C1940	C1950	SESSILE	SESSILE	ANUM	8	X(8)
C1940	C1952	PATHOGEN	PATHOGEN	ANUM	8	X(8)
C1940	C1954	PRODUCES-H2S	PRODUCES-H2S	ANUM	8	X(8)
C1940	C1956	MUTATION-RATE	MUTATION-RATE	ANUM	9	X(9)
C1940	C1958	BAC-SIZE-MICRONS	BAC-SIZE-MICRONS	NUMBER	4	ZZZZ
C1940	C1960	GAS-PRODUCED-BY-BACTERIA	GAS-PROD-BY-BAC	ANUM	25	X(25)
C1940	C1962	ACID-PRODUCED-BY-BACTERIA	ACID-PROD-BY-BAC	ANUM	25	X(25)
C1940	C1964	SURFACTANT-PRODUCED-BY-BAC	SURF-PROD-BY-BAC	ANUM	25	X(25)
C1940	C1968	SOLVENT-PRODUCED-BY BAC	SOL-PROD-BY-BAC	ANUM	25	X(25)
C1940	C1970	POLYMER-PRODUCED-BY-BAC	POLY-PROD-BY-BAC	ANUM	25	X(25)
** Subtotal **					668	
*** Total ***					5693	

8.3.2 Report of DMS files, Filetypes, and Groups

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype
** DMS File Membership : FIELDS						
001	FIELD-REC-NO	ANUM	5	X(5)	FIELDS	FIELDS
002	FIPSDOECODE	ANUM	9	X(9)	FIELDS	FIELDS
003	FIELD-NAME	ANUM	37	X(37)	FIELDS	FIELDS
004	FIELD-REGION	ANUM	14	X(14)	FIELDS	FIELDS
005	GEO-BASIN	ANUM	54	X(54)	FIELDS	FIELDS
006	AAPG-BASIN-CODE	NUMBER	3	ZZZ	FIELDS	FIELDS
007	COUNTRY	ANUM	10	X(10)	FIELDS	FIELDS
008	STATE-CODE	ANUM	2	XX	FIELDS	FIELDS
009	COUNTY-PROVNC	ANUM	23	X(23)	FIELDS	FIELDS
010	FLD-REG-CON-DIST	ANUM	18	X(18)	FIELDS	FIELDS
011	YR-FIELD-FOUND	NUMBER	4	ZZZZ	FIELDS	FIELDS
** DMS File Membership : PROJ-RSV-INFO						
001	PRJ-RSV-REC-NO	ANUM	5	X(5)	PROJECTS	PROJECTS
002	PROJECT-NUMBER	ANUM	10	X(10)	PROJECTS	PROJECTS
003	PRJ-FIPSDOECODE	ANUM	9	X(9)	PROJECTS	PROJECTS
004	CLAY-TYPES	ANUM	55	X(55)	PROJECTS	PROJECTS
005	CLAY-WEIGHT-PCT	NUMBER	4	ZZ.ZZ	PROJECTS	PROJECTS
006	PERM-LOWEST	ANUM	11	X(11)	PROJECTS	PROJECTS
007	INFO-SOURCE	ANUM	45	X(45)	PROJECTS	PROJECTS
008	OIL-GRAVITY-AVG	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS
009	OIL-SAT-INIT	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS
010	OIL-SAT-PRES	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS
011	OIL-SAT-TYPE	ANUM	4	X(4)	PROJECTS	PROJECTS
012	H2O-SAT-INIT	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS
013	H2O-SAT-PRES	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS
014	GAS-SAT-INIT	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS
015	GAS-SAT-PRES	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS
016	PRJ-OOIP-MBBL	NUMBER	10	Z(8).ZZ	PROJECTS	PROJECTS
017	PRJ-POIP-MBBL	NUMBER	10	Z(8).ZZ	PROJECTS	PROJECTS
018	OIL-TYPE	ANUM	27	X(27)	PROJECTS	PROJECTS
019	ACID-NUMBER	ANUM	3	XXX	PROJECTS	PROJECTS
020	OIL-VISCOSITY	NUMBER	10	Z(8).ZZ	PROJECTS	PROJECTS
021	OIL-VISC-TEMP	NUMBER	3	ZZZ	PROJECTS	PROJECTS
022	PATTERN-TYPE	ANUM	77	X(77)	PROJECTS	PROJECTS
023	PROJECT-ACRES	NUMBER	7	Z(5).ZZ	PROJECTS	PROJECTS
024	PATTERN-ACRES	NUMBER	7	Z(5).ZZ	PROJECTS	PROJECTS
025	LITHOLOGY	ANUM	32	X(32)	PROJECTS	PROJECTS
026	DEPOS-ENVIRON	ANUM	35	X(35)	PROJECTS	PROJECTS
027	DEPTH	NUMBER	5	Z(5)	PROJECTS	PROJECTS
028	GROSS-THICK-FT	NUMBER	7	Z(5).ZZ	PROJECTS	PROJECTS
029	NETPAY-THICK-FT	NUMBER	7	Z(5).ZZ	PROJECTS	PROJECTS
030	POROSITY-AVG	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS
031	BHT-F-PRESENT	NUMBER	3	ZZZ	PROJECTS	PROJECTS
032	BHP-PSI-INITIAL	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
033	BHP-PSI-PRESENT	NUMBER	4	ZZZZ	PROJECTS	PROJECTS

8.3.2 Report of DMS files, Filetypes, and Groups

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype
034	PERM-HIGH-AVG	NUMBER	8	Z(6).ZZ	PROJECTS	PROJECTS
035	LORENZ-PERM-COEF	NUMBER	3	Z.ZZ	PROJECTS	PROJECTS
036	DYKSTRA-PARSONS	NUMBER	3	Z.ZZ	PROJECTS	PROJECTS
037	GAS-CAP-TYPE	ANUM	22	X(22)	PROJECTS	PROJECTS
038	H2O-DRIVE	ANUM	19	X(19)	PROJECTS	PROJECTS
039	WETTABILITY	ANUM	28	X(28)	PROJECTS	PROJECTS
040	RSVR-DIP	ANUM	11	X(11)	PROJECTS	PROJECTS
041	PROD-H2O-SAL-PPM	ANUM	14	X(14)	PROJECTS	PROJECTS
042	ROCK-HETEROGENY	ANUM	82	X(82)	PROJECTS	PROJECTS
043	PROJECT-NAME	ANUM	38	X(38)	PROJECTS	PROJECTS
044	RSVR-ID-NUM	ANUM	17	X(17)	PROJECTS	PROJECTS
045	PRODUCING-FORM	ANUM	25	X(25)	PROJECTS	PROJECTS
046	PRODUCING-ZONE	ANUM	24	X(24)	PROJECTS	PROJECTS
047	RESERVOIR-AGE	ANUM	33	X(33)	PROJECTS	PROJECTS
048	RSV-AGE-AAPG	ANUM	3	XXX	PROJECTS	PROJECTS
049	PROJ-STATUS-CODE	ANUM	1	X	PROJECTS	PROJECTS
050	PROJ-STATUS-YEAR	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
051	PRJ-AREA-DISC-YR	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
052	PRJ-AREA-SECN-YR	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
053	PRJ-AREA-TERT-YR	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
054	PRJ-PRIMARY-MBBL	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
055	PRJ-SECN-MBBL	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
056	PRJ-TERT-MBBL	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
057	PRJ-EST-EOR-MBBL	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
058	PREV-PROD-METH	ANUM	54	X(54)	PROJECTS	PROJECTS
059	OTHER-EOR-METH	ANUM	88	X(88)	PROJECTS	PROJECTS
060	PROD-AVG-BPD	NUMBER	6	Z(6)	PROJECTS	PROJECTS
061	PRJ-PROD-WELLS	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
062	PRJ-INJ-WELLS	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
063	PRJ-SHUTIN-WELLS	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
064	PRJ-OBSER-WELLS	NUMBER	4	ZZZZ	PROJECTS	PROJECTS
065	PRJ-OIL-MBBL-EST	NUMBER	9	Z(9)	PROJECTS	PROJECTS
066	LAB-DESIGN-BDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
067	LAB-DESIGN-EDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
068	WELLWORK-BDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
069	WELLWORK-EDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
070	SURF-EQUIP-BDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
071	SURF-EQUIP-EDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
072	PREFLUSH-BDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
073	PREFLUSH-EDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
074	EORFLD-INJ-BDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
075	EORFLD-INJ-EDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
076	INCR-RESPN-BDATE	ANUM	7	X(7)	PROJECTS	PROJECTS
077	PROJECT-STATUS	ANUM	18	X(18)	PROJECTS	PROJECTS
078	LAB-DESIGN-COST	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
079	SURF-EQUIP-COST	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
080	DNHOLE-EQP-COST	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
081	DRILL-EST-COST	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS

8.3.2 Report of DMS files, Filetypes, and Groups

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype
082	PREFLUSH-COST	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
083	EOR-FLUID-COST	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
084	ANNL-EST-OP-COST	NUMBER	11	Z(9).ZZ	PROJECTS	PROJECTS
085	ENVI-IMPACT-STDY	ANUM	7	X(7)	PROJECTS	PROJECTS
086	EIS-AGENCY-NAME	ANUM	67	X(67)	PROJECTS	PROJECTS
087	PROCESS-NAME	ANUM	43	X(43)	PROJECTS	PROJECTS
088	PROCESS-CODE	ANUM	3	XXX	PROJECTS	PROJECTS
089	TECHNOLOGY-TYPE	NUMBER	2	ZZ	PROJECTS	PROJECTS
090	PRODUCER-NAME	ANUM	35	X(35)	PROJECTS	PROJECTS
091	MAJOR-CO-FLAG	ANUM	1	X	PROJECTS	PROJECTS
092	PRODUCER-NAME2	ANUM	41	X(41)	PROJECTS	PROJECTS
093	PROD-BLDG-ADDR1	ANUM	38	X(38)	PROJECTS	PROJECTS
094	PROD-STR-ADDR2	ANUM	29	X(29)	PROJECTS	PROJECTS
095	PRODUCER-CITY	ANUM	16	X(16)	PROJECTS	PROJECTS
096	PRODUCER-STATE	ANUM	14	X(14)	PROJECTS	PROJECTS
097	PRODUCER-CONTACT	ANUM	28	X(28)	PROJECTS	PROJECTS
098	PRODUCER-PHONE	ANUM	21	X(21)	PROJECTS	PROJECTS
099	PARENT-COMPANY	ANUM	38	X(38)	PROJECTS	PROJECTS
100	OPERATOR-NAME	ANUM	36	X(36)	PROJECTS	PROJECTS
101	OPER-BLDG-ADDR1	ANUM	38	X(38)	PROJECTS	PROJECTS
102	OPER-STR-ADDR2	ANUM	27	X(27)	PROJECTS	PROJECTS
103	OPERATOR-CITY	ANUM	16	X(16)	PROJECTS	PROJECTS
104	OPERATOR-STATE	ANUM	13	X(13)	PROJECTS	PROJECTS
105	OPERATOR-CONTACT	ANUM	27	X(27)	PROJECTS	PROJECTS
106	OPERATOR-PHONE	ANUM	24	X(24)	PROJECTS	PROJECTS
** DMS File Membership : IN-SITU-INFO						
001	INSITU-REC-NO	ANUM	5	X(5)	INSITU	INSITU
002	INSITU-PROJ-NO	ANUM	10	X(10)	INSITU	INSITU
003	SITU-PROCES-CODE	ANUM	3	XXX	INSITU	INSITU
004	INSITU-ADDITIVE	ANUM	26	X(26)	INSITU	INSITU
005	INJ-AIR-VOL-PV	NUMBER	5	ZZ.ZZZ	INSITU	INSITU
006	INJ-AIRVOL-MMSCF	NUMBER	9	Z(9)	INSITU	INSITU
007	INJRAT-AVG-MSCFD	NUMBER	8	Z(8)	INSITU	INSITU
008	SURF-INJPRES-AVG	NUMBER	5	Z(5)	INSITU	INSITU
009	COMBUSTION-TYPE	ANUM	3	XXX	INSITU	INSITU
010	INJ-H2OAIR-RATIO	ANUM	12	X(12)	INSITU	INSITU
011	IP-H2O-INJ-METHD	ANUM	10	X(10)	INSITU	INSITU
012	IP-H2O-INJ-PV	NUMBER	6	ZZZ.ZZZ	INSITU	INSITU
013	IP-H2O-INJ-MBBL	NUMBER	9	Z(7).ZZ	INSITU	INSITU
** DMS File Membership : STEAM-INFO						
001	STEAM-REC-NO	ANUM	5	X(5)	STEAM	STEAM
002	STEAM-PROJ-NO	ANUM	10	X(10)	STEAM	STEAM
003	STM-PROCES-CODE	ANUM	3	XXX	STEAM	STEAM
004	STEAM-ADDITIVE	ANUM	54	X(54)	STEAM	STEAM
005	STEAM-FUEL	ANUM	50	X(50)	STEAM	STEAM
006	STM-PROJ-TYPE	ANUM	62	X(62)	STEAM	STEAM

8.3.2 Report of DMS files, Filetypes, and Groups

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype
007	TOT-STM-INJ-TONS	NUMBER	9	Z(9)	STEAM	STEAM
008	STM-INJ-TONS-DAY	NUMBER	5	Z(5)	STEAM	STEAM
009	STEAM-INJ-TEMP-F	NUMBER	4	ZZZZ	STEAM	STEAM
010	STEAM-INJ-PRES	NUMBER	4	ZZZZ	STEAM	STEAM
011	STM-INJ-QUAL-PCT	NUMBER	4	ZZZ.Z	STEAM	STEAM
** DMS File Membership : MISCIBLE-IMM-INF						
001	MIS-IMM-REC-NO	ANUM	5	X(5)	MISC-IMM	MISC-IMM
002	MIS-IMM-PROJ-NO	ANUM	10	X(10)	MISC-IMM	MISC-IMM
003	MI-IM-PROCESCODE	ANUM	3	XXX	MISC-IMM	MISC-IMM
004	DRIVE-FLUIDS	ANUM	64	X(64)	MISC-IMM	MISC-IMM
005	DRIVE-FLUID-AMTS	ANUM	25	X(25)	MISC-IMM	MISC-IMM
006	TYPE-MI-GAS-INJ	ANUM	35	X(35)	MISC-IMM	MISC-IMM
007	INJ-H2OGAS-RATIO	ANUM	10	X(10)	MISC-IMM	MISC-IMM
008	GP-H2O-INJ-METHD	ANUM	13	X(13)	MISC-IMM	MISC-IMM
009	AMT-MIS-EXPECTED	ANUM	21	X(21)	MISC-IMM	MISC-IMM
010	MOLE-WEIGHT-C5P	NUMBER	3	ZZZ	MISC-IMM	MISC-IMM
011	MOLE-WEIGHT-C7P	NUMBER	3	ZZZ	MISC-IMM	MISC-IMM
012	C1N2-IN-OIL-MOLE	NUMBER	5	Z.ZZZZ	MISC-IMM	MISC-IMM
013	CO2-IN-SLUG-MOLE	NUMBER	5	Z.ZZZZ	MISC-IMM	MISC-IMM
014	GP-H2O-INJ-PV	NUMBER	5	ZZ.ZZZ	MISC-IMM	MISC-IMM
015	GP-H2O-INJ-MBBL	NUMBER	10	Z(8).ZZ	MISC-IMM	MISC-IMM
016	EOR-FLUID-INJ-PV	NUMBER	5	ZZ.ZZZ	MISC-IMM	MISC-IMM
017	TOT-EORFLUID-INJ	ANUM	48	X(48)	MISC-IMM	MISC-IMM
018	CO2-MIS-PRES-BHT	NUMBER	4	ZZZZ	MISC-IMM	MISC-IMM
019	OTHER-GAS-INJ	ANUM	10	X(10)	MISC-IMM	MISC-IMM
020	MOLE-FRAC-OTHGAS	NUMBER	4	ZZ.ZZ	MISC-IMM	MISC-IMM
** DMS File Membership : CHEMICAL-PROJ-IN						
001	CHEM-PRJ-REC-NO	ANUM	5	X(5)	CHEMICAL-PROJ	CHEMICAL-PROJ
002	CHEM-PROJ-NO	ANUM	10	X(10)	CHEMICAL-PROJ	CHEMICAL-PROJ
003	CHEM-PROCES-CODE	ANUM	3	XXX	CHEMICAL-PROJ	CHEMICAL-PROJ
004	ORIG-DIVLNT-IONS	NUMBER	6	Z(6)	CHEMICAL-PROJ	CHEMICAL-PROJ
005	CUR-PROD-DI-IONS	NUMBER	6	Z(6)	CHEMICAL-PROJ	CHEMICAL-PROJ
006	INJ-DIVALNT-IONS	NUMBER	6	Z(6)	CHEMICAL-PROJ	CHEMICAL-PROJ
007	WATER-SOURCE	ANUM	41	X(41)	CHEMICAL-PROJ	CHEMICAL-PROJ
008	MOBRATIO-POLYOIL	NUMBER	7	Z(5).ZZ	CHEMICAL-PROJ	CHEMICAL-PROJ
009	MOBRATIO-H2O-OIL	NUMBER	7	Z(5).ZZ	CHEMICAL-PROJ	CHEMICAL-PROJ
010	PREFLUSH-TYPE	ANUM	23	X(23)	CHEMICAL-PROJ	CHEMICAL-PROJ
011	INJ-H2O-SALN-PPM	NUMBER	7	Z(7)	CHEMICAL-PROJ	CHEMICAL-PROJ
012	DIS-SOLIDS-ORIG	NUMBER	7	Z(5).ZZ	CHEMICAL-PROJ	CHEMICAL-PROJ
013	DIS-SOLIDS-PROD	NUMBER	7	Z(5).ZZ	CHEMICAL-PROJ	CHEMICAL-PROJ
014	DIS-SOLIDS-INJ	NUMBER	7	Z(5).ZZ	CHEMICAL-PROJ	CHEMICAL-PROJ
015	DIS-SOLIDS-TYPE	ANUM	14	X(14)	CHEMICAL-PROJ	CHEMICAL-PROJ
016	CHEMICAL-TYPES	ANUM	104	X(104)	CHEMICAL-PROJ	CHEMICAL-PROJ
** DMS File Membership : CHEMICAL-INFO						
001	CHEM-INFO-REC-NO	ANUM	5	X(5)	CHEMICAL-INFO	CHEMICAL-INFO

8.3.2 Report of DMS files, Filetypes, and Groups

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype
002	CHEM-INFO-NO	ANUM	10	X(10)	CHEMICAL-INFO	CHEMICAL-INFO
003	PRFLSH-PH-FACTOR	ANUM	6	X(6)	CHEMICAL-INFO	CHEMICAL-INFO
004	MOLE-WT-SURFACT	NUMBER	4	ZZZZ	CHEMICAL-INFO	CHEMICAL-INFO
005	CHEMICAL-TYPE	ANUM	55	X(55)	CHEMICAL-INFO	CHEMICAL-INFO
006	CONC-EORCHEMS	ANUM	29	X(29)	CHEMICAL-INFO	CHEMICAL-INFO
007	AMT-EORCHEM-INJ	ANUM	73	X(73)	CHEMICAL-INFO	CHEMICAL-INFO
008	CHEM-MANUFACTUR	ANUM	18	X(18)	CHEMICAL-INFO	CHEMICAL-INFO
009	CHEMICAL-NAME	ANUM	52	X(52)	CHEMICAL-INFO	CHEMICAL-INFO
010	SLUG-PV	NUMBER	9	Z(5).Z(4)	CHEMICAL-INFO	CHEMICAL-INFO
011	SLUG-VISCOSITY	NUMBER	8	Z(6).ZZ	CHEMICAL-INFO	CHEMICAL-INFO
012	ABSORPTION-LOSS	NUMBER	6	Z(6)	CHEMICAL-INFO	CHEMICAL-INFO
** DMS File Membership : PRJ-RSV-COMMENTS						
001	COMM-REC-NO	ANUM	5	X(5)	COMMENTS	COMMENTS
002	COM-PROJ-NO	ANUM	10	X(10)	COMMENTS	COMMENTS
003	RSVR-DETAILS1	ANUM	80	X(80)	COMMENTS	COMMENTS
004	RSVR-DETAILS2	ANUM	80	X(80)	COMMENTS	COMMENTS
005	RSVR-DETAILS3	ANUM	80	X(80)	COMMENTS	COMMENTS
006	RSVR-DETAILS4	ANUM	80	X(80)	COMMENTS	COMMENTS
007	RSVR-DETAILS5	ANUM	80	X(80)	COMMENTS	COMMENTS
008	PROJ-DETAILS1	ANUM	80	X(80)	COMMENTS	COMMENTS
009	PROJ-DETAILS2	ANUM	80	X(80)	COMMENTS	COMMENTS
010	PROJ-DETAILS3	ANUM	80	X(80)	COMMENTS	COMMENTS
011	PROJ-DETAILS4	ANUM	80	X(80)	COMMENTS	COMMENTS
012	IMMIS-DETAILS1	ANUM	80	X(80)	COMMENTS	COMMENTS
013	IMMIS-DETAILS2	ANUM	85	X(85)	COMMENTS	COMMENTS
014	BAC-DETAILS	ANUM	80	X(80)	COMMENTS	COMMENTS
** DMS File Membership : ANNUAL-PROJ-INFO						
001	ANNREP-REC-NO	ANUM	5	X(5)	ANNUAL	ANNUAL
002	ANNREP-PROJ-NO	ANUM	10	X(10)	ANNUAL	ANNUAL
003	ANN-REP-YEAR	NUMBER	4	ZZZZ	ANNUAL	ANNUAL
004	ANN-PRD-OIL-MBBL	NUMBER	10	Z(8).ZZ	ANNUAL	ANNUAL
005	ANN-PRODGAS-MMCF	NUMBER	10	Z(8).ZZ	ANNUAL	ANNUAL
006	ANN-PRD-H2O-MBBL	NUMBER	12	Z(10).ZZ	ANNUAL	ANNUAL
007	ANN-INCR-OILMBBL	NUMBER	12	Z(10).ZZ	ANNUAL	ANNUAL
008	ANN-INJ-H2O-MBBL	NUMBER	12	Z(10).ZZ	ANNUAL	ANNUAL
009	ANN-INJ-GAS-MMCF	NUMBER	12	Z(10).ZZ	ANNUAL	ANNUAL
010	ANN-INJ-OTHER	NUMBER	12	Z(10).ZZ	ANNUAL	ANNUAL
011	ANN-PRJ-REMARKS	ANUM	80	X(80)	ANNUAL	ANNUAL
012	CURR-OPERATOR	ANUM	25	X(25)	ANNUAL	ANNUAL
013	CURR-OP-ADDR	ANUM	35	X(35)	ANNUAL	ANNUAL
014	OP-CITY-ST	ANUM	35	X(35)	ANNUAL	ANNUAL
015	ZIPCODE	ANUM	6	X(6)	ANNUAL	ANNUAL
016	CURR-REP-CONTACT	ANUM	25	X(25)	ANNUAL	ANNUAL
017	CONTACT-PHONE	ANUM	13	X(13)	ANNUAL	ANNUAL
018	ANN-PROJ-AREA	NUMBER	6	Z(6)	ANNUAL	ANNUAL
019	CURR-PRESSURE	NUMBER	4	ZZZZ	ANNUAL	ANNUAL

8.3.2 Report of DMS files, Filetypes, and Groups

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype
020	CURR-TEMP-F	NUMBER	3	ZZZ	ANNUAL	ANNUAL
021	ANN-PROCESS-TYPE	ANUM	40	X(40)	ANNUAL	ANNUAL
022	ANN-HEAVYOIL-API	NUMBER	3	ZZ.Z	ANNUAL	ANNUAL
023	ANN-HEVOIL-PTYPE	ANUM	40	X(40)	ANNUAL	ANNUAL
024	ANN-PROD-WELLS	NUMBER	4	ZZZZ	ANNUAL	ANNUAL
025	ANN-INJ-WELLS	NUMBER	4	ZZZZ	ANNUAL	ANNUAL
026	SURF-INJ-PRESS	NUMBER	8	Z(8)	ANNUAL	ANNUAL
027	FLUID-INJ-BPD	NUMBER	8	Z(8)	ANNUAL	ANNUAL
028	AIR-GAS-INJ-RATE	NUMBER	10	Z(10)	ANNUAL	ANNUAL
029	WELLHEAD-TEMP-F	NUMBER	3	ZZZ	ANNUAL	ANNUAL
030	STM-ADDITIVE-AMT	NUMBER	9	Z(9)	ANNUAL	ANNUAL
031	STM-ADDTIVE-TYPE	ANUM	20	X(20)	ANNUAL	ANNUAL
032	EORFLUID-INJ-BBL	NUMBER	9	Z(9)	ANNUAL	ANNUAL
033	TYPE-INJECTANT	ANUM	20	X(20)	ANNUAL	ANNUAL
034	P-DRIVE-INJ-BBL	NUMBER	8	Z(8)	ANNUAL	ANNUAL
035	P-DRIVE-INJ-PCT	NUMBER	4	ZZZ.Z	ANNUAL	ANNUAL
036	POLYMER-TYPE	ANUM	30	X(30)	ANNUAL	ANNUAL
037	PREFLUSH-INJ-BBL	NUMBER	8	Z(8)	ANNUAL	ANNUAL
038	PREFLUSH-INJ-PCT	NUMBER	4	ZZZ.Z	ANNUAL	ANNUAL
039	CHEM-SLUG-PCT	NUMBER	4	ZZZ.Z	ANNUAL	ANNUAL
040	CHAS-H2O-INJ-BBL	NUMBER	8	Z(8)	ANNUAL	ANNUAL
041	CHAS-H2O-INJ-PCT	NUMBER	4	ZZZ.Z	ANNUAL	ANNUAL
042	CUM-GAS-INJ-MMCF	NUMBER	10	Z(10)	ANNUAL	ANNUAL
043	MIN-MISC-PRS-PSI	NUMBER	6	Z(6)	ANNUAL	ANNUAL
044	GAS-SOURCE	ANUM	20	X(20)	ANNUAL	ANNUAL
** DMS File Membership : MONTHLY-PROD-INF						
001	MD-REC-NO	ANUM	5	X(5)	MONTHLY	MONTHLY
002	MD-PROJ-NO	ANUM	10	X(10)	MONTHLY	MONTHLY
003	MD-PROD-YYYYMM	ANUM	8	X(8)	MONTHLY	MONTHLY
004	MD-PROD-OIL-BPD	NUMBER	12	Z(10).ZZ	MONTHLY	MONTHLY
005	MD-INCM-OIL-BPD	NUMBER	12	Z(10).ZZ	MONTHLY	MONTHLY
006	MD-PROD-H2O-BPD	NUMBER	12	Z(10).ZZ	MONTHLY	MONTHLY
007	MD-PRODGAS-MCFPD	NUMBER	12	Z(10).ZZ	MONTHLY	MONTHLY
008	MD-INJ-H2O-BPD	NUMBER	12	Z(10).ZZ	MONTHLY	MONTHLY
009	MD-INJ-GAS-MCFPD	NUMBER	12	Z(10).ZZ	MONTHLY	MONTHLY
010	MD-INJ-OTHR-BPD	NUMBER	12	Z(10).ZZ	MONTHLY	MONTHLY
** DMS File Membership : INTEREST-INFO						
001	INTEREST-REC-NO	ANUM	5	X(5)	INTEREST	INTEREST
002	INTEREST-PROJ-NO	ANUM	10	X(10)	INTEREST	INTEREST
003	INTEREST-NAME	ANUM	50	X(50)	INTEREST	INTEREST
004	INTEREST-FRACTN	NUMBER	8	ZZZ.Z(5)	INTEREST	INTEREST
** DMS File Membership : LEASE-INFO						
001	LEASE-REC-NO	ANUM	5	X(5)	LEASE	LEASE
002	LEASE-PROJ-NO	ANUM	10	X(10)	LEASE	LEASE
003	LEASE-NAME	ANUM	120	X(120)	LEASE	LEASE

8.3.2 Report of DMS files, Filetypes, and Groups

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype
004	LEASE-NAME2	ANUM	74	X(74)	LEASE	LEASE
** DMS File Membership : MICROBIAL-PROJEC						
001	MICROB-REC-NO	ANUM	5	X(5)	MICROBIAL	MICROBIAL
002	MICROB-PROJ-NO	ANUM	10	X(10)	MICROBIAL	MICROBIAL
003	PH-BEFOR-BAC-INJ	NUMBER	4	ZZ.Z9	MICROBIAL	MICROBIAL
004	RSVR-GAS-BEFORE	ANUM	15	X(15)	MICROBIAL	MICROBIAL
005	INDIGENOUS-BAC	ANUM	40	X(40)	MICROBIAL	MICROBIAL
006	B-PREFLUSH-TYPE	ANUM	40	X(40)	MICROBIAL	MICROBIAL
007	BACTERIA-IJ-NAME	ANUM	40	X(40)	MICROBIAL	MICROBIAL
008	BACTERIC-IJ-CONC	NUMBER	9	Z(8).Z	MICROBIAL	MICROBIAL
009	BACTERIA-IJ-VOL	ANUM	40	X(40)	MICROBIAL	MICROBIAL
010	NUTRNT-SLUG-TYPE	ANUM	40	X(40)	MICROBIAL	MICROBIAL
011	NUTRNT-SLUG-CONC	ANUM	25	X(25)	MICROBIAL	MICROBIAL
012	NUTRNT-SLUG-VOL	NUMBER	4	ZZZ.Z	MICROBIAL	MICROBIAL
013	OTHER-INJECTANTS	ANUM	40	X(40)	MICROBIAL	MICROBIAL
014	SOAK-PERIOD	NUMBER	4	ZZZ.Z	MICROBIAL	MICROBIAL
015	PH-AFTER-BAC-INJ	NUMBER	4	ZZ.ZZ	MICROBIAL	MICROBIAL
016	OIL-VIS-AFTER-IJ	NUMBER	10	Z(8).ZZ	MICROBIAL	MICROBIAL
017	GAS-PROD-AFTER	ANUM	40	X(40)	MICROBIAL	MICROBIAL
018	BAC-RECVED-AFTER	ANUM	40	X(40)	MICROBIAL	MICROBIAL
019	BAC-GENUS-SPECS	ANUM	40	X(40)	MICROBIAL	MICROBIAL
020	OTHER-BAC-NAME	ANUM	40	X(40)	MICROBIAL	MICROBIAL
021	ANAEROBIC	ANUM	8	X(8)	MICROBIAL	MICROBIAL
022	SPORE-FORMING	ANUM	8	X(8)	MICROBIAL	MICROBIAL
023	SESSILE	ANUM	8	X(8)	MICROBIAL	MICROBIAL
024	PATHOGEN	ANUM	8	X(8)	MICROBIAL	MICROBIAL
025	PRODUCES-H2S	ANUM	8	X(8)	MICROBIAL	MICROBIAL
026	MUTATION-RATE	ANUM	9	X(9)	MICROBIAL	MICROBIAL
027	BAC-SIZE-MICRONS	NUMBER	4	ZZZZ	MICROBIAL	MICROBIAL
028	GAS-PROD-BY-BAC	ANUM	25	X(25)	MICROBIAL	MICROBIAL
029	ACID-PROD-BY-BAC	ANUM	25	X(25)	MICROBIAL	MICROBIAL
030	SURF-PROD-BY-BAC	ANUM	25	X(25)	MICROBIAL	MICROBIAL
031	SOL-PROD-BY-BAC	ANUM	25	X(25)	MICROBIAL	MICROBIAL
032	POLY-PROD-BY-BAC	ANUM	25	X(25)	MICROBIAL	MICROBIAL

8.3.3 Report of DMS files, Filetypes, Groups, Primary Keys, Secondary Keys

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype	Prim Key	Sec. Key
** DMS File Membership : FIELDS								
001	FIELD-REC-NO	ANUM	5	X(5)	FIELDS	FIELDS	.T.	.F.
002	FIPSDOECODE	ANUM	9	X(9)	FIELDS	FIELDS	.F.	.T.
003	FIELD-NAME	ANUM	37	X(37)	FIELDS	FIELDS	.F.	.T.
007	COUNTRY	ANUM	10	X(10)	FIELDS	FIELDS	.F.	.T.
008	STATE-CODE	ANUM	2	XX	FIELDS	FIELDS	.F.	.T.
** DMS File Membership : PROJ-RSV-INFO								
001	PRJ-RSV-REC-NO	ANUM	5	X(5)	PROJECTS	PROJECTS	.T.	.F.
002	PROJECT-NUMBER	ANUM	10	X(10)	PROJECTS	PROJECTS	.F.	.T.
003	PRJ-FIPSDOECODE	ANUM	9	X(9)	PROJECTS	PROJECTS	.F.	.T.
008	OIL-GRAVITY-AVG	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS	.F.	.T.
020	OIL-VISCOSITY	NUMBER	10	Z(8).ZZ	PROJECTS	PROJECTS	.F.	.T.
023	PROJECT-ACRES	NUMBER	7	Z(5).ZZ	PROJECTS	PROJECTS	.F.	.T.
024	PATTERN-ACRES	NUMBER	7	Z(5).ZZ	PROJECTS	PROJECTS	.F.	.T.
025	LITHOLOGY	ANUM	32	X(32)	PROJECTS	PROJECTS	.F.	.T.
027	DEPTH	NUMBER	5	Z(5)	PROJECTS	PROJECTS	.F.	.T.
029	NETPAY-THICK-FT	NUMBER	7	Z(5).ZZ	PROJECTS	PROJECTS	.F.	.T.
030	POROSITY-AVG	NUMBER	3	ZZ.Z	PROJECTS	PROJECTS	.F.	.T.
033	BHP-PSI-PRESENT	NUMBER	4	ZZZZ	PROJECTS	PROJECTS	.F.	.T.
034	PERM-HIGH-AVG	NUMBER	8	Z(6).ZZ	PROJECTS	PROJECTS	.F.	.T.
041	PROD-H2O-SAL-PPM	ANUM	14	X(14)	PROJECTS	PROJECTS	.F.	.T.
045	PRODUCING-FORM	ANUM	25	X(25)	PROJECTS	PROJECTS	.F.	.T.
047	RESERVOIR-AGE	ANUM	33	X(33)	PROJECTS	PROJECTS	.F.	.T.
049	PROJ-STATUS-CODE	ANUM	1	X	PROJECTS	PROJECTS	.F.	.T.
050	PROJ-STATUS-YEAR	NUMBER	4	ZZZZ	PROJECTS	PROJECTS	.F.	.T.
053	PRJ-AREA-TERT-YR	NUMBER	4	ZZZZ	PROJECTS	PROJECTS	.F.	.T.
087	PROCESS-NAME	ANUM	43	X(43)	PROJECTS	PROJECTS	.F.	.T.
088	PROCESS-CODE	ANUM	3	XXX	PROJECTS	PROJECTS	.F.	.T.
090	PRODUCER-NAME	ANUM	35	X(35)	PROJECTS	PROJECTS	.F.	.T.
091	MAJOR-CO-FLAG	ANUM	1	X	PROJECTS	PROJECTS	.F.	.T.
100	OPERATOR-NAME	ANUM	36	X(36)	PROJECTS	PROJECTS	.F.	.T.
** DMS File Membership : IN-SITU-INFO								
001	INSITU-REC-NO	ANUM	5	X(5)	INSITU	INSITU	.T.	.F.
002	INSITU-PROJ-NO	ANUM	10	X(10)	INSITU	INSITU	.F.	.T.
004	INSITU-ADDITIVE	ANUM	26	X(26)	INSITU	INSITU	.F.	.T.
** DMS File Membership : STEAM-INFO								
001	STEAM-REC-NO	ANUM	5	X(5)	STEAM	STEAM	.T.	.F.
002	STEAM-PROJ-NO	ANUM	10	X(10)	STEAM	STEAM	.F.	.T.
004	STEAM-ADDITIVE	ANUM	54	X(54)	STEAM	STEAM	.F.	.T.
005	STEAM-FUEL	ANUM	50	X(50)	STEAM	STEAM	.F.	.T.
006	STM-PROJ-TYPE	ANUM	62	X(62)	STEAM	STEAM	.F.	.T.

8.3.3 Report of DMS files, Filetypes, Groups, Primary Keys, Secondary Keys

Position Number	Reliance Name	Field Type	Length	Edit Picture	Group Name	Filetype	Prim Key	Sec. Key
** DMS File Membership : MISCIBLE-IMM-INF								
001	MIS-IMM-REC-NO	ANUM	5	X(5)	MISC-IMM	MISC-IMM	.T.	.F.
002	MIS-IMM-PROJ-NO	ANUM	10	X(10)	MISC-IMM	MISC-IMM	.F.	.T.
006	TYPE-MI-GAS-INJ	ANUM	35	X(35)	MISC-IMM	MISC-IMM	.F.	.T.
007	INJ-H2OGAS-RATIO	ANUM	10	X(10)	MISC-IMM	MISC-IMM	.F.	.T.
** DMS File Membership : CHEMICAL-PROJ-IN								
001	CHEM-PRJ-REC-NO	ANUM	5	X(5)	CHEMICAL-PROJ	CHEMICAL-PROJ	.T.	.F.
002	CHEM-PROJ-NO	ANUM	10	X(10)	CHEMICAL-PROJ	CHEMICAL-PROJ	.F.	.T.
016	CHEMICAL-TYPES	ANUM	104	X(104)	CHEMICAL-PROJ	CHEMICAL-PROJ	.F.	.T.
** DMS File Membership : CHEMICAL-INFO								
001	CHEM-INFO-REC-NO	ANUM	5	X(5)	CHEMICAL-INFO	CHEMICAL-INFO	.T.	.F.
002	CHEM-INFO-NO	ANUM	10	X(10)	CHEMICAL-INFO	CHEMICAL-INFO	.F.	.T.
005	CHEMICAL-TYPE	ANUM	55	X(55)	CHEMICAL-INFO	CHEMICAL-INFO	.F.	.T.
** DMS File Membership : PRJ-RSV-COMMENTS								
001	COMM-REC-NO	ANUM	5	X(5)	COMMENTS	COMMENTS	.T.	.F.
002	COM-PROJ-NO	ANUM	10	X(10)	COMMENTS	COMMENTS	.F.	.T.
** DMS File Membership : ANNUAL-PROJ-INFO								
001	ANNREP-REC-NO	ANUM	5	X(5)	ANNUAL	ANNUAL	.T.	.F.
002	ANNREP-PROJ-NO	ANUM	10	X(10)	ANNUAL	ANNUAL	.F.	.T.
003	ANN-REP-YEAR	NUMBER	4	ZZZZ	ANNUAL	ANNUAL	.F.	.T.
004	ANN-PRD-OIL-MBBL	NUMBER	10	Z(8).ZZ	ANNUAL	ANNUAL	.F.	.T.
** DMS File Membership : MONTHLY-PROD-INF								
001	MD-REC-NO	ANUM	5	X(5)	MONTHLY	MONTHLY	.T.	.F.
002	MD-PROJ-NO	ANUM	10	X(10)	MONTHLY	MONTHLY	.F.	.T.
003	MD-PROD-YYYYMM	ANUM	8	X(8)	MONTHLY	MONTHLY	.F.	.T.
** DMS File Membership : INTEREST-INFO								
001	INTEREST-REC-NO	ANUM	5	X(5)	INTEREST	INTEREST	.T.	.F.
002	INTEREST-PROJ-NO	ANUM	10	X(10)	INTEREST	INTEREST	.F.	.T.
** DMS File Membership : LEASE-INFO								
001	LEASE-REC-NO	ANUM	5	X(5)	LEASE	LEASE	.T.	.F.
002	LEASE-PROJ-NO	ANUM	10	X(10)	LEASE	LEASE	.F.	.T.
** DMS File Membership : MICROBIAL-PROJEC								
001	MICROB-REC-NO	ANUM	5	X(5)	MICROBIAL	MICROBIAL	.T.	.F.
002	MICROB-PROJ-NO	ANUM	10	X(10)	MICROBIAL	MICROBIAL	.F.	.T.

8.4 Appendix of Dataviews

8.4.1 Simple dataview FIELDSDV based on the DMS file FIELDS

Field Name	Query Field Name	Edit Picture
FIELD-REC-NO	FIELD-REC-NO	X(5)
FIPSDOECODE	FIPSDOECODE	X(9)
FIELD-NAME	FIELD-NAME	X(37)
FIELD-REGION	FIELD-REGION	X(14)
GEO-BASIN	GEO-BASIN	X(54)
AAPG-BASIN-CODE	AAPG-BASIN-CODE	ZZZ
COUNTRY	COUNTRY	X(10)
STATE-CODE	STATE-CODE	XX
COUNTY-PROVNC	COUNTY-PROVNC	X(23)
FLD-REG-CON-DIST	FLD-REG-CON-DIST	X(18)
YR-FIELD-FOUND	YR-FIELD-FOUND	ZZZZ

8.4.2 Simple dataview PROJECTSDV based on the DMS file PROJ-RSV-INFO

Field Name	Query Field Name	Edit Picture
PRJ-RSV-REC-NO	PRJ-RSV-REC-NO	X(5)
PROJECT-NUMBER	PROJECT-NUMBER	X(10)
PRJ-FIPSDOECODE	PRJ-FIPSDOECODE	X(9)
CLAY-TYPES	CLAY-TYPES	X(55)
CLAY-WEIGHT-PCT	CLAY-WEIGHT-PCT	ZZ.ZZ
PERM-LOWEST	PERM-LOWEST	X(11)
INFO-SOURCE	INFO-SOURCE	X(45)
OIL-GRAVITY-AVG	OIL-GRAVITY-AVG	ZZ.Z
OIL-SAT-INIT	OIL-SAT-INIT	ZZ.Z
OIL-SAT-PRES	OIL-SAT-PRES	ZZ.Z
OIL-SAT-TYPE	OIL-SAT-TYPE	X(4)
H2O-SAT-INIT	H2O-SAT-INIT	ZZ.Z
H2O-SAT-PRES	H2O-SAT-PRES	ZZ.Z
GAS-SAT-INIT	GAS-SAT-INIT	ZZ.Z
GAS-SAT-PRES	GAS-SAT-PRES	ZZ.Z
PRJ-OOIP-MBBL	PRJ-OOIP-MBBL	Z(8).ZZ
PRJ-POIP-MBBL	PRJ-POIP-MBBL	Z(8).ZZ
OIL-TYPE	OIL-TYPE	X(27)
ACID-NUMBER	ACID-NUMBER	XXX
OIL-VISCOSITY	OIL-VISCOSITY	Z(8).ZZ
OIL-VISC-TEMP	OIL-VISC-TEMP	ZZZ
PATTERN-TYPE	PATTERN-TYPE	X(77)
PROJECT-ACRES	PROJECT-ACRES	Z(5).ZZ
PATTERN-ACRES	PATTERN-ACRES	Z(5).ZZ
LITHOLOGY	LITHOLOGY	X(32)
DEPOS-ENVIRON	DEPOS-ENVIRON	X(35)
DEPTH	DEPTH	Z(5)
GROSS-THICK-FT	GROSS-THICK-FT	Z(5).ZZ
NETPAY-THICK-FT	NETPAY-THICK-FT	Z(5).ZZ
POROSITY-AVG	POROSITY-AVG	ZZ.Z
BHT-F-PRESENT	BHT-F-PRESENT	ZZZ
BHP-PSI-INITIAL	BHP-PSI-INITIAL	ZZZZ
BHP-PSI-PRESENT	BHP-PSI-PRESENT	ZZZZ
PERM-HIGH-AVG	PERM-HIGH-AVG	Z(6).ZZ
LORENZ-PERM-COEF	LORENZ-PERM-COEF	Z.ZZ
DYKSTRA-PARSONS	DYKSTRA-PARSONS	Z.ZZ
GAS-CAP-TYPE	GAS-CAP-TYPE	X(22)
H2O-DRIVE	H2O-DRIVE	X(19)
WETTABILITY	WETTABILITY	X(28)
RSVR-DIP	RSVR-DIP	X(11)
PROD-H2O-SAL-PPM	PROD-H2O-SAL-PPM	X(14)
ROCK-HETEROGENY	ROCK-HETEROGENY	X(82)
PROJECT-NAME	PROJECT-NAME	X(38)
RSVR-ID-NUM	RSVR-ID-NUM	X(17)
PRODUCING-FORM	PRODUCING-FORM	X(25)
PRODUCING-ZONE	PRODUCING-ZONE	X(24)
RESERVOIR-AGE	RESERVOIR-AGE	X(33)

8.4.2 Simple dataview PROJECTSDV based on the DMS file PROJ-RSV-INFO

Field Name	Query Field Name	Edit Picture
RSV-AGE-AAPG	RSV-AGE-AAPG	XXX
PROJ-STATUS-CODE	PROJ-STATUS-CODE	X
PROJ-STATUS-YEAR	PROJ-STATUS-YEAR	ZZZZ
PRJ-AREA-DISC-YR	PRJ-AREA-DISC-YR	ZZZZ
PRJ-AREA-SECN-YR	PRJ-AREA-SECN-YR	ZZZZ
PRJ-AREA-TERT-YR	PRJ-AREA-TERT-YR	ZZZZ
PRJ-PRIMARY-MBBL	PRJ-PRIMARY-MBBL	Z(9).ZZ
PRJ-SECN-MBBL	PRJ-SECN-MBBL	Z(9).ZZ
PRJ-TERT-MBBL	PRJ-TERT-MBBL	Z(9).ZZ
PRJ-EST-EOR-MBBL	PRJ-EST-EOR-MBBL	Z(9).ZZ
PREV-PROD-METH	PREV-PROD-METH	X(54)
OTHER-EOR-METH	OTHER-EOR-METH	X(88)
PROD-AVG-BPD	PROD-AVG-BPD	Z(6)
PRJ-PROD-WELLS	PRJ-PROD-WELLS	ZZZZ
PRJ-INJ-WELLS	PRJ-INJ-WELLS	ZZZZ
PRJ-SHUTIN-WELLS	PRJ-SHUTIN-WELLS	ZZZZ
PRJ-OBSER-WELLS	PRJ-OBSER-WELLS	ZZZZ
PRJ-OIL-MBBL-EST	PRJ-OIL-MBBL-EST	Z(9)
LAB-DESIGN-BDATE	LAB-DESIGN-BDATE	X(7)
LAB-DESIGN-EDATE	LAB-DESIGN-EDATE	X(7)
WELLWORK-BDATE	WELLWORK-BDATE	X(7)
WELLWORK-EDATE	WELLWORK-EDATE	X(7)
SURF-EQUIP-BDATE	SURF-EQUIP-BDATE	X(7)
SURF-EQUIP-EDATE	SURF-EQUIP-EDATE	X(7)
PREFLUSH-BDATE	PREFLUSH-BDATE	X(7)
PREFLUSH-EDATE	PREFLUSH-EDATE	X(7)
EORFLD-INJ-BDATE	EORFLD-INJ-BDATE	X(7)
EORFLD-INJ-EDATE	EORFLD-INJ-EDATE	X(7)
INCR-RESPN-BDATE	INCR-RESPN-BDATE	X(7)
PROJECT-STATUS	PROJECT-STATUS	X(18)
LAB-DESIGN-COST	LAB-DESIGN-COST	Z(9).ZZ
SURF-EQUIP-COST	SURF-EQUIP-COST	Z(9).ZZ
DNHOLE-EQP-COST	DNHOLE-EQP-COST	Z(9).ZZ
DRILL-EST-COST	DRILL-EST-COST	Z(9).ZZ
PREFLUSH-COST	PREFLUSH-COST	Z(9).ZZ
EOR-FLUID-COST	EOR-FLUID-COST	Z(9).ZZ
ANNL-EST-OP-COST	ANNL-EST-OP-COST	Z(9).ZZ
ENVI-IMPACT-STDY	ENVI-IMPACT-STDY	X(7)
EIS-AGENCY-NAME	EIS-AGENCY-NAME	X(67)
PROCESS-NAME	PROCESS-NAME	X(43)
PROCESS-CODE	PROCESS-CODE	XXX
TECHNOLOGY-TYPE	TECHNOLOGY-TYPE	ZZ
PRODUCER-NAME	PRODUCER-NAME	X(35)
MAJOR-CO-FLAG	MAJOR-CO-FLAG	X
PRODUCER-NAME2	PRODUCER-NAME2	X(41)
PROD-BLDG-ADDR1	PROD-BLDG-ADDR1	X(38)
PROD-STR-ADDR2	PROD-STR-ADDR2	X(29)

8.4.2 Simple dataview PROJECTSDV based on the DMS file PROJ-RSV-INFO

Field Name	Query Field Name	Edit Picture
PRODUCER-CITY	PRODUCER-CITY	X(16)
PRODUCER-STATE	PRODUCER-STATE	X(14)
PRODUCER-CONTACT	PRODUCER-CONTACT	X(28)
PRODUCER-PHONE	PRODUCER-PHONE	X(21)
PARENT-COMPANY	PARENT-COMPANY	X(38)
OPERATOR-NAME	OPERATOR-NAME	X(36)
OPER-BLDG-ADDR1	OPER-BLDG-ADDR1	X(38)
OPER-STR-ADDR2	OPER-STR-ADDR2	X(27)
OPERATOR-CITY	OPERATOR-CITY	X(16)
OPERATOR-STATE	OPERATOR-STATE	X(13)
OPERATOR-CONTACT	OPERATOR-CONTACT	X(27)
OPERATOR-PHONE	OPERATOR-PHONE	X(24)

8.4.3 Composite dataview QUICK based on the join of two
DMS files: FIELDS to PROJ-RSV-INFO
Matching : FIPSDOECODE with PRJ-FIPSDOECODE

Field Name	Query Field Name	Edit Picture
FIELD-NAME	FIELD-NAME	X(37)
STATE-CODE	STATE-CODE	XX
PRJ-RSV-REC-NO	PRJ-RSV-REC-NO	X(5)
PROJECT-NUMBER	PROJECT-NUMBER	X(10)
OIL-GRAVITY-AVG	OIL-GRAVITY-AVG	ZZ.Z
PROJECT-ACRES	PROJECT-ACRES	Z(5).ZZ
DEPTH	DEPTH	Z(5)
NETPAY-THICK-FT	NETPAY-THICK-FT	Z(5).ZZ
POROSITY-AVG	POROSITY-AVG	ZZ.Z
PERM-HIGH-AVG	PERM-HIGH-AVG	Z(6).ZZ
PROJECT-NAME	PROJECT-NAME	X(38)
PRODUCING-FORM	PRODUCING-FORM	X(25)
PRODUCING-ZONE	PRODUCING-ZONE	X(24)
PRJ-AREA-TERT-YR	PRJ-AREA-TERT-YR	ZZZZ
PROCESS-NAME	PROCESS-NAME	X(43)
PROCESS-CODE	PROCESS-CODE	XXX
OPERATOR-NAME	OPERATOR-NAME	X(36)

8.4.4 Composite dataview PRJTALLIES based on the join of two
DMS files: FIELDS to PROJ-RSV-INFO
Matching : FIPSDOECODE with PRJ-FIPSDOECODE

Field Name	Query Field Name	Edit Picture
STATE-CODE	STATE-CODE	XX
PRJ-AREA-TERT-YR	PRJ-AREA-TERT-YR	ZZZZ
PROCESS-NAME	PROCESS-NAME	X(43)
PROCESS-CODE	PROCESS-CODE	XXX

8.4.5 Simple dataview INSITU based on the DMS file IN-SITU-INFO

Field Name	Query Field Name	Edit Picture
INSITU-REC-NO	INSITU-REC-NO	X(5)
INSITU-PROJ-NO	INSITU-PROJ-NO	X(10)
SITU-PROCES-CODE	SITU-PROCES-CODE	XXX
INSITU-ADDITIVE	INSITU-ADDITIVE	X(26)
INJ-AIR-VOL-PV	INJ-AIR-VOL-PV	ZZ.ZZZ
INJ-AIRVOL-MMSCF	INJ-AIRVOL-MMSCF	Z(9)
INJRAT-AVG-MSCFD	INJRAT-AVG-MSCFD	Z(8)
SURF-INJPRES-AVG	SURF-INJPRES-AVG	Z(5)
COMBUSTION-TYPE	COMBUSTION-TYPE	XXX
INJ-H2OAIR-RATIO	INJ-H2OAIR-RATIO	X(12)
IP-H2O-INJ-METHD	IP-H2O-INJ-METHD	X(10)
IP-H2O-INJ-PV	IP-H2O-INJ-PV	ZZZ.ZZZ
IP-H2O-INJ-MBBL	IP-H2O-INJ-MBBL	Z(7).ZZ

8.4.6 Simple dataview STEAM based on the DMS file STEAM-INFO

Field Name	Query Field Name	Edit Picture
STEAM-REC-NO	STEAM-REC-NO	X(5)
STEAM-PROJ-NO	STEAM-PROJ-NO	X(10)
STM-PROCES-CODE	STM-PROCES-CODE	XXX
STEAM-ADDITIVE	STEAM-ADDITIVE	X(54)
STEAM-FUEL	STEAM-FUEL	X(50)
STM-PROJ-TYPE	STM-PROJ-TYPE	X(62)
TOT-STM-INJ-TONS	TOT-STM-INJ-TONS	Z(9)
STM-INJ-TONS-DAY	STM-INJ-TONS-DAY	Z(5)
STEAM-INJ-TEMP-F	STEAM-INJ-TEMP-F	ZZZZ
STEAM-INJ-PRES	STEAM-INJ-PRES	ZZZZ
STM-INJ-QUAL-PCT	STM-INJ-QUAL-PCT	ZZZ.Z

8.4.7 Composite dataview THERMALDV joining of three DMS files

Join file: STEAM-INFO to PROJ-RSV-INFO
Matching : STEAM-PROJ-NO with PROJECT-NUMBER
Join file: IN-SITU-INFO to PROJ-RSV-INFO
Matching : INSTIU-PROF-NO with PROJECT-NUMBER

Field Name	Query Field Name	Edit Picture
PROJECT-NUMBER	PROJECT-NUMBER	X(10)
OIL-GRAVITY-AVG	OIL-GRAVITY-AVG	ZZ.Z
PRJ-OOIP-MBBL	PRJ-OOIP-MBBL	Z(8).ZZ
PRJ-POIP-MBBL	PRJ-POIP-MBBL	Z(8).ZZ
INSITU-PROJ-NO	INSITU-PROJ-NO	X(10)
SITU-PROCES-CODE	SITU-PROCES-CODE	XXX
STEAM-PROJ-NO	STEAM-PROJ-NO	X(10)
STM-PROCES-CODE	STM-PROCES-CODE	XXX

8.4.8 Simple dataview MISCIBLE based on the DMS file MISCIBLE

Field Name	Query Field Name	Edit Picture
MIS-IMM-REC-NO	MIS-IMM-REC-NO	X(5)
MIS-IMM-PROJ-NO	MIS-IMM-PROJ-NO	X(10)
MI-IM-PROCESCODE	MI-IM-PROCESCODE	XXX
DRIVE-FLUIDS	DRIVE-FLUIDS	X(64)
DRIVE-FLUID-AMTS	DRIVE-FLUID-AMTS	X(25)
TYPE-MI-GAS-INJ	TYPE-MI-GAS-INJ	X(35)
INJ-H2OGAS-RATIO	INJ-H2OGAS-RATIO	X(10)
GP-H2O-INJ-METHD	GP-H2O-INJ-METHD	X(13)
AMT-MIS-EXPECTED	AMT-MIS-EXPECTED	X(21)
MOLE-WEIGHT-C5P	MOLE-WEIGHT-C5P	ZZZ
MOLE-WEIGHT-C7P	MOLE-WEIGHT-C7P	ZZZ
C1N2-IN-OIL-MOLE	C1N2-IN-OIL-MOLE	Z.ZZZZ
CO2-IN-SLUG-MOLE	CO2-IN-SLUG-MOLE	Z.ZZZZ
GP-H2O-INJ-PV	GP-H2O-INJ-PV	ZZ.ZZZ
GP-H2O-INJ-MBBL	GP-H2O-INJ-MBBL	Z(8).ZZ
EOR-FLUID-INJ-PV	EOR-FLUID-INJ-PV	ZZ.ZZZ
TOT-EORFLUID-INJ	TOT-EORFLUID-INJ	X(48)
CO2-MIS-PRES-BHT	CO2-MIS-PRES-BHT	ZZZZ
OTHER-GAS-INJ	OTHER-GAS-INJ	X(10)
MOLE-FRAC-OTHGAS	MOLE-FRAC-OTHGAS	ZZ.ZZ

8.4.9 Composite dataview MISIMMDV based on the join of two
DMS files: MISCIBLE-IMM-INF to PROJ-RSV-INFO
Matching : MIS-IMM-PROJ-NO with PROJECT-NUMBER

Field Name	Query Field Name	Edit Picture
PROJECT-NUMBER	PROJECT-NUMBER	X(10)
PROCESS-NAME	PROCESS-NAME	X(43)
MIS-IMM-PROJ-NO	MIS-IMM-PROJ-NO	X(10)
MI-IM-PROCESCODE	MI-IM-PROCESCODE	XXX

8.4.10 Simple dataview CHEMICALPROJECTS based on the DMS file CHEMICAL-PROJ-IN

Field Name	Query Field Name	Edit Picture
CHEM-PRJ-REC-NO	CHEM-PRJ-REC-NO	X(5)
CHEM-PROJ-NO	CHEM-PROJ-NO	X(10)
CHEM-PROCES-CODE	CHEM-PROCES-CODE	XXX
ORIG-DIVLNT-IONS	ORIG-DIVLNT-IONS	Z(6)
CUR-PROD-DI-IONS	CUR-PROD-DI-IONS	Z(6)
INJ-DIVALNT-IONS	INJ-DIVALNT-IONS	Z(6)
WATER-SOURCE	WATER-SOURCE	X(41)
MOBRATIO-POLYOIL	MOBRATIO-POLYOIL	Z(5).ZZ
MOBRATIO-H2O-OIL	MOBRATIO-H2O-OIL	Z(5).ZZ
PREFLUSH-TYPE	PREFLUSH-TYPE	X(23)
INJ-H2O-SALN-PPM	INJ-H2O-SALN-PPM	Z(7)
DIS-SOLIDS-ORIG	DIS-SOLIDS-ORIG	Z(5).ZZ
DIS-SOLIDS-PROD	DIS-SOLIDS-PROD	Z(5).ZZ
DIS-SOLIDS-INJ	DIS-SOLIDS-INJ	Z(5).ZZ
DIS-SOLIDS-TYPE	DIS-SOLIDS-TYPE	X(14)
CHEMICAL-TYPES	CHEMICAL-TYPES	X(104)

8.4.11 Composite dataview CHEMPROJDV based on the join of two
DMS files: CHEMICAL-PROJ-IN to PROJ-RSV-INFO
Matching : CHEM-PROJ-NO with PROJECT-NUMBER

Field Name	Query Field Name	Edit Picture
PROJECT-NUMBER	PROJECT-NUMBER	X(10)
PROCESS-NAME	PROCESS-NAME	X(43)
CHEM-PROJ-NO	CHEM-PROJ-NO	X(10)
CHEM-PROCES-CODE	CHEM-PROCES-CODE	XXX

8.4.12 Composite dataview CHEMINFODV based on the join of two
DMS files: CHEMICAL-INFO to PROJ-RSV-INFO
Matching : CHEM-INFO-NO with PROJECT-NUMBER

Field Name	Query Field Name	Edit Picture
PROJECT-NUMBER	PROJECT-NUMBER	X(10)
PROCESS-NAME	PROCESS-NAME	X(43)
CHEM-INFO-NO	CHEM-INFO-NO	X(10)

8.4.13 Composite dataview CHEMONLYDV based on the join of two
DMS files: CHEMICAL-INFO to CHEMICAL-PROJ-IN
Matching : CHEM-INFO-NO with CHEM-PROJ-NO

Field Name	Query Field Name	Edit Picture
CHEM-PROJ-NO	CHEM-PROJ-NO	X(10)
CHEM-PROCES-CODE	CHEM-PROCES-CODE	XXX
CHEM-INFO-NO	CHEM-INFO-NO	X(10)
CHEMICAL-TYPE	CHEMICAL-TYPE	X(55)

8.4.14 Simple dataview COMMENTS based on the DMS file PRJ-RSV-COMMENTS

Field Name	Query Field Name	Edit Picture
COMM-REC-NO	COMM-REC-NO	X(5)
COMM-PROJ-NO	COMM-PROJ-NO	X(10)
RSVR-DETAILS1	RSVR-DETAILS1	X(80)
RSVR-DETAILS2	RSVR-DETAILS2	X(80)
RSVR-DETAILS3	RSVR-DETAILS3	X(80)
RSVR-DETAILS4	RSVR-DETAILS4	X(80)
RSVR-DETAILS5	RSVR-DETAILS5	X(80)
PROJ-DETAILS1	PROJ-DETAILS1	X(80)
PROJ-DETAILS2	PROJ-DETAILS2	X(80)
PROJ-DETAILS3	PROJ-DETAILS3	X(80)
PROJ-DETAILS4	PROJ-DETAILS4	X(80)
IMMIS-DETAILS1	IMMIS-DETAILS1	X(80)
IMMIS-DETAILS2	IMMIS-DETAILS2	X(85)
BAC-DETAILS	BAC-DETAILS	X(80)

8.4.15 Simple dataview ANNUAL based on the DMS ANNUAL-PROJ-INFO

Field Name	Query Field Name	Edit Picture
ANNREP-REC-NO	ANNREP-REC-NO	X(5)
ANNREP-PROJ-NO	ANNREP-PROJ-NO	X(10)
ANN-REP-YEAR	ANN-REP-YEAR	ZZZZ
ANN-PRD-OIL-MBBL	ANN-PRD-OIL-MBBL	Z(8).ZZ
ANN-PRODGAS-MMCF	ANN-PRODGAS-MMCF	Z(8).ZZ
ANN-PRD-H2O-MBBL	ANN-PRD-H2O-MBBL	Z(10).ZZ
ANN-INCR-OILMBBL	ANN-INCR-OILMBBL	Z(10).ZZ
ANN-INJ-H2O-MBBL	ANN-INJ-H2O-MBBL	Z(10).ZZ
ANN-INJ-GAS-MMCF	ANN-INJ-GAS-MMCF	Z(10).ZZ
ANN-INJ-OTHER	ANN-INJ-OTHER	Z(10).ZZ
ANN-PRJ-REMARKS	ANN-PRJ-REMARKS	X(80)
CURR-OPERATOR	CURR-OPERATOR	X(25)
CURR-OP-ADDR	CURR-OP-ADDR	X(35)
OP-CITY-ST	OP-CITY-ST	X(35)
ZIPCODE	ZIPCODE	X(6)
CURR-REP-CONTACT	CURR-REP-CONTACT	X(25)
CONTACT-PHONE	CONTACT-PHONE	X(13)
ANN-PROJ-AREA	ANN-PROJ-AREA	Z(6)
CURR-PRESSURE	CURR-PRESSURE	ZZZZ
CURR-TEMP-F	CURR-TEMP-F	ZZZ
ANN-PROCESS-TYPE	ANN-PROCESS-TYPE	X(40)
ANN-HEAVYOIL-API	ANN-HEAVYOIL-API	ZZ.Z
ANN-HEVOIL-PTYPE	ANN-HEVOIL-PTYPE	X(40)
ANN-PROD-WELLS	ANN-PROD-WELLS	ZZZZ
ANN-INJ-WELLS	ANN-INJ-WELLS	ZZZZ
SURF-INJ-PRESS	SURF-INJ-PRESS	Z(8)
FLUID-INJ-BPD	FLUID-INJ-BPD	Z(8)
AIR-GAS-INJ-RATE	AIR-GAS-INJ-RATE	Z(10)
WELLHEAD-TEMP-F	WELLHEAD-TEMP-F	ZZZ
STM-ADDITIVE-AMT	STM-ADDITIVE-AMT	Z(9)
STM-ADDTIVE-TYPE	STM-ADDTIVE-TYPE	X(20)
EORFLUID-INJ-BBL	EORFLUID-INJ-BBL	Z(9)
TYPE-INJECTANT	TYPE-INJECTANT	X(20)
P-DRIVE-INJ-BBL	P-DRIVE-INJ-BBL	Z(8)
P-DRIVE-INJ-PCT	P-DRIVE-INJ-PCT	ZZZ.Z
POLYMER-TYPE	POLYMER-TYPE	X(30)
PREFLUSH-INJ-BBL	PREFLUSH-INJ-BBL	Z(8)
PREFLUSH-INJ-PCT	PREFLUSH-INJ-PCT	ZZZ.Z
CHEM-SLUG-PCT	CHEM-SLUG-PCT	ZZZ.Z
CHAS-H2O-INJ-BBL	CHAS-H2O-INJ-BBL	Z(8)
CHAS-H2O-INJ-PCT	CHAS-H2O-INJ-PCT	ZZZ.Z
CUM-GAS-INJ-MMCF	CUM-GAS-INJ-MMCF	Z(10)
MIN-MISC-PRS-PSI	MIN-MISC-PRS-PSI	Z(6)
GAS-SOURCE	GAS-SOURCE	X(20)

8.4.16 Simple dataview MONTHLY based on the DMS file MONTHLY-PROD-INF

Field Name	Query Field Name	Edit Picture
MD-REC-NO	MD-REC-NO	X(5)
MD-PROJ-NO	MD-PROJ-NO	X(10)
MD-PROD-YYYYMM	MD-PROD-YYYYMM	X(8)
MD-PROD-OIL-BPD	MD-PROD-OIL-BPD	Z(10).ZZ
MD-INCM-OIL-BPD	MD-INCM-OIL-BPD	Z(10).ZZ
MD-PROD-H2O-BPD	MD-PROD-H2O-BPD	Z(10).ZZ
MD-PRODGAS-MCFPD	MD-PRODGAS-MCFPD	Z(10).ZZ
MD-INJ-H2O-BPD	MD-INJ-H2O-BPD	Z(10).ZZ
MD-INJ-GAS-MCFPD	MD-INJ-GAS-MCFPD	Z(10).ZZ
MD-INJ-OTHR-BPD	MD-INJ-OTHR-BPD	Z(10).ZZ

8.4.17 Simple dataview INTEREST based on the DMS file INTEREST-INFO

Field Name	Query Field Name	Edit Picture
INTEREST-REC-NO	INTEREST-REC-NO	X(5)
INTEREST-PROJ-NO	INTEREST-PROJ-NO	X(10)
INTEREST-NAME	INTEREST-NAME	X(50)
INTEREST-FRACTN	INTEREST-FRACTN	ZZZ.Z(5)

8.4.18 Composite dataview INTERESTDV based on the join of two
DMS files: INTEREST-INFO to PROJ-RSV-INFO
Matching : INTEREST-PROJ-NO with PROJECT-NUMBER

Field Name	Query Field Name	Edit Picture
PROJECT-NUMBER	PROJECT-NUMBER	X(10)
INTEREST-NAME	INTEREST-NAME	X(50)
INTEREST-FRACTN	INTEREST-FRACTN	ZZZ.Z(5)

8.4.19 Simple dataview LEASE based on the DMS file LEASE-INFO

Field Name	Query Field Name	Edit Picture
LEASE-REC-NO	LEASE-REC-NO	X(5)
LEASE-PROJ-NO	LEASE-PROJ-NO	X(10)
LEASE-NAME	LEASE-NAME	X(120)
LEASE-NAME2	LEASE-NAME2	X(74)

8.4.20 Composite dataview LEASEDV based on the join of two
DMS files: LEASE-INFO to PROJ-RSV-INFO
Matching : LEASE-PROJ-NO with PROJECT-NUMBER

Field Name	Query Field Name	Edit Picture
PROJECT-NUMBER	PROJECT-NUMBER	X(10)
LEASE-NAME	LEASE-NAME	X(120)

8.5.1 Selected fields and edit pictures for profile: PRJ-RSV-PROF1

Field Name	Numbered physical order of field	Edit Picture
PRJ-RSV-REC-NO	1	X(5)
PROJECT-NUMBER	2	X(10)
PRJ-FIPSDOECODE	3	X(9)
CLAY-TYPES	4	X(55)
CLAY-WEIGHT-PCT	5	ZZ.ZZ
INFO-SOURCE	7	X(45)
OIL-GRAVITY-AVG	8	ZZ.Z
OIL-SAT-INIT	9	ZZ.Z
OIL-SAT-PRES	10	ZZ.Z
OIL-SAT-TYPE	11	X(4)
H2O-SAT-INIT	12	ZZ.Z
H2O-SAT-PRES	13	ZZ.Z
GAS-SAT-INIT	14	ZZ.Z
GAS-SAT-PRES	15	ZZ.Z
PRJ-OOIP-MBBL	16	Z(8).ZZ
PRJ-POIP-MBBL	17	Z(8).ZZ
OIL-TYPE	18	X(27)
ACID-NUMBER	19	XXX
OIL-VISCOSITY	20	Z(8).ZZ
OIL-VISC-TEMP	21	ZZZ
PATTERN-TYPE	22	X(77)
PROJECT-ACRES	23	Z(5).ZZ
PATTERN-ACRES	24	Z(5).ZZ
LITHOLOGY	25	X(32)
DEPOS-ENVIRON	26	X(35)
DEPTH	27	Z(5)
GROSS-THICK-FT	28	Z(5).ZZ
NETPAY-THICK-FT	29	Z(5).ZZ
POROSITY-AVG	30	ZZ.Z
BHT-F-PRESENT	31	ZZZ
BHP-PSI-INITIAL	32	ZZZZ
BHP-PSI-PRESENT	33	ZZZZ
PERM-HIGH-AVG	34	Z(6).ZZ
LORENZ-PERM-COEF	35	Z.ZZ
DYKSTRA-PARSONS	36	Z.ZZ
GAS-CAP-TYPE	37	X(22)
H2O-DRIVE	38	X(19)
WETTABILITY	39	X(28)
RSVR-DIP	40	X(11)
PROD-H2O-SAL-PPM	41	X(14)

8.5.3 Selected fields and edit pictures for profile: Lease-Profile

Field Name	Numbered physical order of field	Edit Picture
LEASE-REC-NO	1	X(5)
LEASE-PROJ-NO	2	X(10)
LEASE-NAME	3	X(120)
LEASE-NAME2	4	X(74)

8.7.3 Size of DMS Files

AVERAGE NUMBER OF RECORDS IN A PAGE = 2

DMS FILE NAME	RECORD SIZE	NUMBER OF RECORDS	DATA AREA SIZE	INDEX AREA SIZE
FIELDS	179	527	664740.	231400.
PROJ-RSV-INFO	1718	1259	1573226.	2011400.
IN-SITU-INFO	111	56	80182.	67640.
STEAM-INFO	210	158	206774.	167320.
MISCIBLE-IMM-INFO	288	128	169541.	106800.
CHEMICAL-PROJ-INFO	260	193	250213.	113920.
CHEMICAL-INFO	275	467	590274.	153080.
PRJ-RSV-COMMENTS	980	390	494709.	71200.
ANNUAL-PROJ-INFO	615	823	1032106.	206480.
MONTHLY-PROD-INFO	107	9447	11735360.	1206840.
INTEREST-INFO	73	1540	1921976.	163760.
LEASE-INFO	209	809	1014730.	103240.
MICROBIAL-PROJ-INFO	668	6	18127.	42720.

8.7.4 Statistics on disk space requirements

TOTAL DATA AREA SIZE = 0.19752E+08 BYTES , OR MBYTES = 19.752
TOTAL INDEX AREA SIZE = 0.46458E+07 BYTES , OR MBYTES = 4.6458
DATABASE CONTROL AREA SIZE = 385324.0 BYTES
BOTTOM LINE: TOTAL DISC SPACE REQUIREMENTS = 24.7831 MBYTES